

Phe Leu Asn Phe Lys Val Phe Leu Phe Asn Arg Phe Cys Thr Asp Cys
 35 40 45
 Lys Asn Lys Val Leu Arg Ala Tyr Asn Ile Leu Ile Gly Glu Leu Asp
 50 55 60
 Cys Ser Lys Glu Lys Gly Tyr Cys Ala Ala Leu Tyr Glu Gly Leu Arg
 65 70 75 80
 Cys Cys Pro His Glu Arg His Ile His Val Cys Cys Glu Thr Asp Phe
 85 90 95
 Ile Ala His Leu Leu Gly Arg Ala Glu Pro Glu Phe Ala Gly Gly Arg
 100 105 110
 Arg Glu Arg His Ala Lys Thr Ile Asp Ile Ala Gln Glu Glu Val Leu
 115 120 125
 Thr Cys Leu Gly Ile His Leu Tyr Glu Arg Leu His Arg Ile Trp Gln
 130 135 140
 Lys Leu Arg Ala Glu Glu Gln Thr Trp Gln Met Leu Phe Tyr Leu Gly
 145 150 155 160
 Val Asp Ala Leu Arg Lys Ser Phe Glu Met Thr Val Glu Lys Val Gln
 165 170 175
 Gly Ile Ser Arg Leu Glu Gln Leu Cys Glu Glu Phe Ser Glu Glu Glu
 180 185 190
 Arg Val Arg Glu Leu Lys Gln Glu Lys Lys Arg Gln Lys Arg Lys Asn
 195 200 205
 Arg Arg Lys Asn Lys Cys Val Cys Asp Ile Pro Thr Pro Leu Gln Thr
 210 215 220
 Ala Asp Glu Lys Glu Val Ser Gln Glu Lys Glu Thr Asp Phe Ile Glu
 225 230 235 240
 Asn Ser Ser Cys Lys Ala Cys Gly Ser Thr Glu Asp Gly Asn Thr Cys
 245 250 255
 Val Glu Val Ile Val Thr Asn Glu Asn Thr Ser Cys Thr Cys Pro Ser
 260 265 270
 Ser Gly Asn Leu Leu Gly Ser Pro Lys Ile Lys Lys Gly Leu Ser Pro
 275 280 285
 His Cys Asn Gly Ser Asp Cys Gly Tyr Ser Ser Ser Met
 290 295 300

<210> 3584

<211> 321

<212> PRT

<213> Homo sapiens

<400> 3584

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Met Ser Val Gln Glu Ala Gly Ala Thr Ser Pro Pro Ala Arg Ile Leu
  1             5             10             15
Lys Glu Pro Gly Pro Ala Gln Pro Leu Ser Ala Gly Pro Glu Trp Asp
          20             25             30
Arg Gly Arg Gly Val Arg Arg Arg Cys Gly Pro Gly Val Leu Leu Gly
      35             40             45
Ala Ser Ser Val Ser Trp Gly Leu Ala Thr Ser Gly His Gln Gly Arg
      50             55             60
Gly Cys Gly Asp Gly Gly Gly Ala Arg Val Pro Thr Lys Ser Val Pro
      65             70             75             80
Gly Gly Gly Pro Arg Ala Ser Arg Ser Val Arg Glu Val Ala Gly Gly
          85             90             95
Gly Phe Ala Cys Asn Pro Gly Lys Gly Pro Ala Ala Val Arg Leu Ala
          100             105             110
Leu Gly Gly Gly Trp Lys Ile Ser Lys Ser Pro Ile Pro Val Gln Met
          115             120             125
Ala Ala Gly Ala Ala Gly Cys Arg Thr Gln Ala Arg Gly Gln Arg Leu
          130             135             140
Thr Ser Arg Gly Arg Glu Ser Pro Glu Ala Thr Gly Val Pro Glu Arg
          145             150             155             160
Arg Gly Asp Pro Glu Thr Arg Arg Asn Arg Lys Ser Leu Thr Pro Gly
          165             170             175
Ser Gly Glu Phe Gly Val Arg Ser Gln Ser Cys Asp Ser Thr Val Pro
          180             185             190
Glu Ser Leu Glu Arg Ala Leu Trp Ala Gln Ser Ser Gln Leu Ala Gly
          195             200             205
Gly Pro Gly Leu Ala Pro Arg Pro Gly Ala Ser Gly Arg Gly Arg Trp
          210             215             220
Val Ser Ala Pro Leu Pro Pro Lys Gly Thr Glu Thr Phe Phe Cys Val
          225             230             235             240

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Leu Pro Ser Ala Leu Arg Ala Ala Leu Ser Cys Gly Pro Ser Trp Gly
 245 250 255
 Glu Asp Ser Gly Pro Arg His Arg Glu Leu Arg Pro Asp Pro Asp Ser
 260 265 270
 Arg Arg Ala Ser Ala Glu Arg Ser Pro Arg Cys Pro Pro Gly Ser Pro
 275 280 285
 Arg Lys Ala Gly Pro Gly Arg Arg Asp Ala Arg Gly Ala Ala Leu Gly
 290 295 300
 Gly Ala Phe Arg Val Leu Ala Gly Arg Ala Leu Leu Arg Arg Gly Met
 305 310 315 320
 Glu

<210> 3585

<211> 278

<212> PRT

<213> Homo sapiens

<400> 3585

Met Ser His Leu Pro Thr Ala Pro Arg Val Leu Phe Gln Leu Pro Ala
 1 5 10 15
 Ile His Ser Pro Thr Pro Leu Gly Pro Gln Leu Arg Leu Glu Pro Asp
 20 25 30
 Asn Trp Arg Ser Gln Gln Asp Ser Glu Val Ser Glu Ser Ser Ala Pro
 35 40 45
 Asp Gly Pro Gly Ser Ala Met Trp Ser Gln His Gly Leu Trp Tyr Leu
 50 55 60
 Val Ala Ala Phe Leu Leu Arg Trp Ala Pro Val Lys Thr Arg Val Met
 65 70 75 80
 Val Asp Gly Ser Pro Met Thr Met Glu Lys Ala Leu Lys His Phe Glu
 85 90 95
 Ala Gln Ser Thr Glu Lys Glu Arg Ala Phe Ala Gly Arg Val Gly Trp
 100 105 110
 Ala Phe Leu Thr Val Leu Gln Glu Val His Thr Gln Ser Leu Arg Asp
 115 120 125

Thr Ala Gln Val Arg Asp Leu Gln Gly Gln Ala Glu Arg Leu Glu Ile
 130 135 140
 Arg Thr Tyr Ser Leu Lys Arg Glu Leu Gly Pro Ala Thr Ser Val Gly
 145 150 155 160
 Leu Gly Gln Pro Ser Gln Ser Glu Thr Pro Ala Arg Ser Asp Thr Lys
 165 170 175
 Glu Glu Glu Pro Pro Leu Gln Ala His Pro Val Val Arg Gln Lys Ile
 180 185 190
 Glu Gln Glu Gln Pro Leu Gly Pro Gln Gly Val Gly Val Gln Gly Pro
 195 200 205
 Pro Thr Val Val Glu His Met Ser Tyr Ser Ala Tyr Thr Pro Thr Asp
 210 215 220
 Leu His Lys Leu Gly Lys Gln Cys Gln Gln Cys Met Gly Glu Pro Leu
 225 230 235 240
 Ser Thr Trp Met Leu Cys Leu Leu Asp Glu Gly Ala Asp Gly Ile Val
 245 250 255
 Cys Ser Ala Ser Glu Met Glu Lys Leu Ala Ser Ile Met Thr His Pro
 260 265 270
 Ser Asn Ser Asp Cys Arg
 275

<210> 3586

<211> 120

<212> PRT

<213> Homo sapiens

<400> 3586

Met Pro Leu Val Asn Thr Leu Val Phe Trp Gly Val Ser Gly Asn Ser
 1 5 10 15
 Val Gly Gln Asp Cys Phe Ile Tyr Gly Ser Phe Arg Val Cys Tyr Tyr
 20 25 30
 Leu Pro Leu Ile Phe Thr Tyr His Leu Ser Phe Pro Val Phe Ser Tyr
 35 40 45
 Leu Phe Leu Asn Phe His Ser Pro Lys Lys Met Ser Val Phe Gly Pro
 50 55 60

Val Pro Lys Glu Ser Ala Ile Arg Ile Leu Arg Gly Ile Ile Leu Asn
65 70 75 80
Gln Tyr Ile Asn Phe Arg Gly Trp Pro Gln Asp Leu Gln Gln Gly Ser
85 90 95
Val Phe Leu Cys Leu Thr Leu Gln Gly Phe Arg Gly Gln Gly Val Ser
100 105 110
Ser Asn Met Arg Val Arg Gly Trp
115 120

<210> 3587

<211> 499

<212> PRT

<213> Homo sapiens

<400> 3587

Met Thr Glu Glu Ser Ser Asp Val Pro Arg Glu Leu Ile Glu Ser Ile
1 5 10 15
Lys Asp Val Ile Gly Arg Lys Ile Lys Ile Ser Val Lys Lys Lys Val
20 25 30
Lys Leu Glu Val Lys Gly Asp Lys Val Glu Asn Lys Val Leu Val Leu
35 40 45
Thr Ser Cys Arg Ala Phe Leu Val Thr Ala Arg Ile Pro Thr Lys Leu
50 55 60
Glu Leu Thr Phe Ser Tyr Leu Glu Ile His Gly Val Val Cys Ser Lys
65 70 75 80
Ser Ala Gln Met Ile Val Glu Thr Glu Lys Cys Ser Ile Ser Met Lys
85 90 95
Met Ala Ser Pro Glu Asp Val Ser Glu Val Leu Ala His Ile Gly Thr
100 105 110
Cys Leu Arg Lys Ile Phe Pro Gly Leu Ser Pro Val Arg Ile Met Lys
115 120 125
Lys Val Ser Met Glu Pro Ser Glu Arg Leu Ala Ser Leu Gln Ala Leu
130 135 140
Trp Asp Ser Gln Thr Val Ala Glu Gln Gly Pro Cys Gly Gly Phe Ser
145 150 155 160

Gln Met Tyr Ala Cys Val Cys Asp Trp Leu Gly Phe Ser Tyr Arg Glu			
165	170	175	
Glu Val Gln Trp Asp Val Asp Thr Ile Tyr Leu Thr Gln Asp Thr Arg			
180	185	190	
Glu Leu Asn Leu Gln Asp Phe Ser His Leu Asp His Arg Asp Leu Ile			
195	200	205	
Pro Ile Ile Ala Ala Leu Glu Tyr Asn Gln Trp Phe Thr Lys Leu Ser			
210	215	220	
Ser Lys Asp Leu Lys Leu Ser Thr Asp Val Cys Glu Gln Ile Leu Arg			
225	230	235	240
Val Val Ser Arg Ser Asn Arg Leu Glu Glu Leu Val Leu Glu Asn Ala			
245	250	255	
Gly Leu Arg Thr Asp Phe Ala Gln Lys Leu Ala Ser Ala Leu Ala His			
260	265	270	
Asn Pro Asn Ser Gly Leu His Thr Ile Asn Leu Ala Gly Asn Pro Leu			
275	280	285	
Glu Asp Arg Gly Val Ser Ser Leu Ser Ile Gln Phe Ala Lys Leu Pro			
290	295	300	
Lys Gly Leu Lys His Leu Asn Leu Ser Lys Thr Ser Leu Ser Pro Lys			
305	310	315	320
Gly Val Asn Ser Leu Ser Gln Ser Leu Ser Ala Asn Pro Leu Thr Ala			
325	330	335	
Ser Thr Leu Val His Leu Asp Leu Ser Gly Asn Val Leu Arg Gly Asp			
340	345	350	
Asp Leu Ser His Met Tyr Asn Phe Leu Ala Gln Pro Asn Ala Ile Val			
355	360	365	
His Leu Asp Leu Ser Asn Thr Glu Cys Ser Leu Asp Met Val Cys Gly			
370	375	380	
Ala Leu Leu Arg Gly Cys Leu Gln Tyr Leu Ala Val Leu Asn Leu Ser			
385	390	395	400
Arg Thr Val Phe Ser His Arg Lys Gly Lys Glu Val Pro Pro Ser Phe			
405	410	415	
Lys Gln Phe Phe Ser Ser Ser Leu Ala Leu Met His Ile Asn Leu Ser			
420	425	430	
Gly Thr Lys Leu Ser Pro Glu Pro Leu Lys Ala Leu Leu Leu Gly Leu			
435	440	445	

Ala Cys Asn His Asn Leu Lys Gly Val Ser Leu Asp Leu Ser Asn Cys
 450 455 460
 Glu Leu Arg Ser Gly Gly Ala Gln Val Leu Glu Gly Cys Ile Ala Glu
 465 470 475 480
 Ile His Asn Ile Thr Gln Leu Gly Thr Arg Tyr Arg Asn Ala Val Leu
 485 490 495
 Arg Val Tyr

<210> 3588

<211> 131

<212> PRT

<213> Homo sapiens

<400> 3588

Met Leu Leu Phe Asn Trp Ile Cys Ile Val Ile Thr Gly Leu Ala Met
 1 5 10 15
 Asp Met Gln Leu Leu Met Ile Pro Leu Ile Met Ser Val Leu Tyr Val
 20 25 30
 Trp Ala Gln Leu Asn Arg Asp Met Ile Val Ser Phe Trp Phe Gly Thr
 35 40 45
 Arg Phe Lys Ala Cys Tyr Leu Pro Trp Val Ile Leu Gly Phe Asn Tyr
 50 55 60
 Ile Ile Gly Gly Ser Tyr Pro Met Asp Leu Gly Gly Arg Asn Phe Leu
 65 70 75 80
 Ser Thr Pro Gln Phe Leu Tyr Arg Trp Leu Pro Ser Arg Arg Gly Gly
 85 90 95
 Val Ser Gly Phe Gly Val Pro Pro Ala Ser Met Arg Arg Ala Ala Asp
 100 105 110
 Gln Asn Gly Gly Gly Gly Arg His Asn Trp Gly Gln Gly Phe Arg Leu
 115 120 125
 Gly Asp Gln
 130

<210> 3589

<211> 352

<212> PRT

<213> Homo sapiens

<400> 3589

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Met His Thr Gln Pro Leu Lys Glu Ala Lys Arg Met Pro Asp Arg Pro
  1             5             10             15
Ile Lys Trp Asp Lys Ser Tyr Tyr Ser Phe Thr Gly Phe Lys Asp Pro
      20             25             30
Asp Glu Asp Leu Glu Gln Val Ser Arg Val Glu Thr Thr Leu Thr Ser
      35             40             45
Trp Leu Asp Asn Asn Gly Lys Ser Ala Val Lys Lys Leu Lys Asn Ser
      50             55             60
Leu Pro Leu Arg Lys Glu Leu Asp Arg Leu Lys Asp Glu Leu Ser His
      65             70             75             80
Gln Leu Gln Leu Ser Asp Ile Arg Trp Gln Arg Ser Trp Gly Ile Ala
      85             90             95
His Arg Cys Ser Gln Leu His Ser Leu Ser Arg Leu Ala Gln Gln Asn
      100            105            110
Leu Glu Thr Leu Lys Lys Ala Lys Gly Cys Thr Ile Ile Phe Thr Asp
      115            120            125
Arg Ser Gly Met Ser Ala Val Gly His Val Met Leu Gly Thr Met Asp
      130            135            140
Val His His His Trp Thr Lys Leu Phe Glu Arg Leu Pro Ser Tyr Phe
      145            150            155            160
Asp Leu Gln Arg Arg Leu Met Ile Leu Glu Asp Gln Ile Ser Tyr Leu
      165            170            175
Leu Gly Gly Ile Gln Val Val Tyr Ile Glu Glu Leu Gln Pro Val Leu
      180            185            190
Thr Leu Glu Glu Tyr Tyr Ser Leu Leu Asp Val Phe Tyr Asn Arg Leu
      195            200            205
Leu Lys Ser Arg Ile Leu Phe His Pro Arg Ser Leu Arg Gly Leu Gln
      210            215            220
Met Ile Leu Asn Ser Asp Arg Tyr Ala Pro Ser Leu His Glu Leu Gly
      225            230            235            240

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His	Phe	Asn	Ile	Pro	Thr	Leu	Cys	Asp	Pro	Ala	Asn	Leu	Gln	Trp	Phe
245				250				255							
Ile	Leu	Thr	Lys	Ala	Gln	Gln	Ala	Arg	Glu	Asn	Met	Lys	Arg	Lys	Glu
260				265				270							
Glu	Leu	Lys	Val	Ile	Glu	Asn	Glu	Leu	Ile	Gln	Ala	Ser	Thr	Lys	Lys
275				280				285							
Phe	Ser	Leu	Glu	Lys	Leu	Tyr	Lys	Glu	Pro	Ser	Ile	Ser	Ser	Ile	Gln
290				295				300							
Met	Val	Asp	Cys	Cys	Lys	Arg	Leu	Leu	Glu	Gln	Ser	Leu	Pro	Tyr	Leu
305				310				315				320			
His	Gly	Met	His	Leu	Cys	Ile	Ser	His	Phe	Tyr	Ser	Val	Met	Gln	Asp
325				330				335							
Gly	Asp	Leu	Cys	Ile	Pro	Trp	Asn	Trp	Lys	Asn	Gly	Glu	Ala	Ile	Lys
340				345				350							

<210> 3590

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3590

Met	Ala	Ala	Ala	Pro	Asp	Tyr	Pro	Ala	Pro	Phe	Tyr	Pro	Ser	Ser	Gly
1				5					10					15	
Arg	Asn	Pro	Ser	Pro	Arg	Pro	Phe	Pro	Leu	Lys	Gly	Asn	Gly	Pro	Lys
			20					25					30		
Val	Gly	Arg	Ala	Ala	Arg	Leu	Pro	Arg	Ser	Ile	Gln	Val	Lys	Arg	Glu
		35					40					45			
Ser	Asp	Gln	Thr	Gly	Glu	Pro	Arg	Gly	Pro	Ile	Phe	Arg	Asp	Leu	Thr
	50					55					60				
Gly	His	Leu	Asp	Arg	Pro	Leu	Gln	Leu	Gly	Thr	Phe	Gln	Glu	Asn	Glu
65					70					75				80	
Gly	Asn	Val	Val	Ile	Ala	Pro	Glu	Pro	His	Ser	Ser	Ser	Glu	Val	Leu
				85					90					95	
Phe	Thr	Ser	Leu	Trp	Lys	Lys	Ile	Gly	Tyr	Leu	Phe	Leu	Val	Glu	Arg
		100						105					110		

Val Glu Ile

115

<210> 3591

<211> 127

<212> PRT

<213> Homo sapiens

<400> 3591

Met Ile Ser Ser Arg Met Pro Cys Leu Leu Val Leu Asn Ser Val Ser

1

5

10

15

Phe Pro Leu Phe Leu Ala Val Tyr Tyr Trp Pro Ala Ser Leu Asp Gly

20

25

30

Ala Ala Gly Met Val Gln Ile Asn Glu Gly His Thr Lys Val Ile Leu

35

40

45

Leu Lys Ala His Val Gly Leu Arg Pro Glu Leu Thr Asp Thr Glu Met

50

55

60

Ser Leu Ile Leu Cys Leu Phe His Cys Leu Trp Tyr Tyr Ser Ala Phe

65

70

75

80

Thr Glu Glu Arg Val Leu Gly Asn Arg Asn Thr Arg Ile Ile Leu Val

85

90

95

Gln Gln Leu Leu Ala Thr Pro Lys Phe Thr Tyr Phe Leu Pro Pro Ala

100

105

110

Phe Phe Ile Asp Leu Ala Ala Ser Glu Ile Phe Ala Ala Ser Gln

115

120

125

<210> 3592

<211> 161

<212> PRT

<213> Homo sapiens

<400> 3592

Met His Gly Ser Lys Trp Leu Asp Ser Trp Val Gly Trp Gly Ser Gln

1

5

10

15

Ser Arg Leu Pro Glu Gly Leu Glu Val Thr Pro Pro Gly Gly Asp Gly

	20		25		30
Ser Ser Gln Val Gly Cys His Gln Ser Arg Gln His Cys Leu Leu Gly					
35		40		45	
Thr Pro Gly Glu Ala Asp Arg Val Ser Gly Phe Gln Leu Gly Gly Ser					
50		55		60	
Pro Ala Glu Asn Pro Val Lys Pro Ala Phe His Ser Ser Pro Val Cys					
65		70		75	80
Pro Glu Pro Gly Leu Arg Ala Ala Leu Cys Met Pro Ala Leu Pro Thr					
	85		90		95
Trp Gln Ser Ser Gly Gly Arg Thr Pro Arg Leu Ser Gly Asp Ser Gln					
100		105		110	
Ala Asn Val Ser Ile Pro Gly Ser Ala Leu Ser Cys His Glu Phe Arg					
115		120		125	
Lys Ala Glu Ala Ala Gln Gln Met Gly Thr Arg Gly Arg Thr Ala Ile					
130		135		140	
His Ser Leu Ser Ser His Pro Gln Ala Cys Arg Ala Pro Gly Leu Trp					
145		150		155	160
Cys					

<210> 3593

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3593

Met Pro Leu Gly Ala Gly Gly Leu Gly Arg Leu Ala Arg Gly Leu Thr			
1	5	10	15
Ser Gly Val Glu Gly Asn Gly Ile Lys Ala Thr Glu Phe Pro Gly Pro			
20	25	30	
Gly Pro Glu Arg Tyr Pro Cys Leu His Leu Ala Leu Pro Cys Ala Trp			
35	40	45	
Leu Ser Pro Ser Ser Trp Ala His Ser His Val Pro Pro Ile Thr Arg			

50 55 60
 His Leu His Phe Cys Trp Cys Phe Trp Glu Ser Asp Leu Gln Thr Ala
 65 70 75 80
 Ser Ala Ser Pro Gly Ser Leu Leu Ser Gly Ala Phe Ser Arg Thr Val
 85 90 95
 Lys Gln Thr Leu Gly Ala Arg Pro Arg Asp Pro His Phe Lys Tyr Lys
 100 105 110
 Val

<210> 3594

<211> 100

<212> PRT

<213> Homo sapiens

<400> 3594

Met Gln Val Val Arg Glu Val Gly Glu Ser Gln Gln Ser Gln Ala Ser
 1 5 10 15
 Pro Ser Ser His Ala Ile Gln Arg Ala Ile Leu Thr Pro Thr Val Pro
 20 25 30
 Pro Leu Cys Asn Ser Thr Glu Ser Val Phe Arg Gln Trp Thr Ser Arg
 35 40 45
 Ala Glu Asn Leu Pro His Val Thr His Leu Pro Ala Ala Val Glu Lys
 50 55 60
 Gly Phe Ser Ser Ser Cys Thr Cys Gly Val Tyr Met Pro Asp Met Cys
 65 70 75 80
 Pro Pro Leu Ser Ser Gly Gln Glu Ala Ser Gln Pro Val Gln Ile Val
 85 90 95
 Thr Lys Phe Ser
 100

<210> 3595

<211> 418

<212> PRT

<213> Homo sapiens

<400> 3595

Met Leu Glu Asn His Ile Leu His Lys Arg Ile Tyr Ile Leu Thr Phe
 1 5 10 15
 Phe Ser Gln Gln Ile Phe Ile Leu Cys His Ala His Phe Ile Phe Phe
 20 25 30
 Phe Thr Val Arg Asp Phe Cys Arg Gln Asp Glu Lys Cys Asp Tyr Tyr
 35 40 45
 Phe Ser Val Asp Ala Asp Val Val Leu Thr Asn Pro Arg Thr Leu Lys
 50 55 60
 Ile Leu Ile Glu Gln Asn Arg Lys Ile Ile Ala Pro Leu Val Thr Arg
 65 70 75 80
 His Gly Lys Leu Trp Ser Asn Phe Trp Gly Ala Leu Ser Pro Asp Gly
 85 90 95
 Tyr Tyr Ala Arg Ser Glu Asp Tyr Val Asp Ile Val Gln Gly Asn Arg
 100 105 110
 Val Gly Val Trp Asn Val Pro Tyr Met Ala Asn Val Tyr Leu Ile Lys
 115 120 125
 Gly Lys Thr Leu Arg Ser Glu Met Asn Glu Arg Asn Tyr Phe Val Arg
 130 135 140
 Asp Lys Leu Asp Pro Asp Met Ala Leu Cys Arg Asn Ala Arg Glu Met
 145 150 155 160
 Thr Leu Gln Arg Glu Lys Asp Ser Pro Thr Pro Glu Thr Phe Gln Met
 165 170 175
 Leu Ser Pro Pro Lys Gly Val Phe Met Tyr Ile Ser Asn Arg His Glu
 180 185 190
 Phe Gly Arg Leu Leu Ser Thr Ala Asn Tyr Asn Thr Ser His Tyr Asn
 195 200 205
 Asn Asp Leu Trp Gln Ile Phe Glu Asn Pro Val Asp Trp Lys Glu Lys
 210 215 220
 Tyr Ile Asn Arg Asp Tyr Ser Lys Ile Phe Thr Glu Asn Ile Val Glu
 225 230 235 240
 Gln Pro Cys Pro Asp Val Phe Trp Phe Pro Ile Phe Ser Glu Lys Ala
 245 250 255
 Cys Asp Glu Leu Val Glu Glu Met Glu His Tyr Gly Lys Trp Ser Gly

260 265 270
 Gly Lys His His Asp Ser Arg Ile Ser Gly Gly Tyr Glu Asn Val Pro
 275 280 285
 Thr Asp Asp Ile His Met Lys Gln Val Asp Leu Glu Asn Val Trp Leu
 290 295 300
 His Phe Ile Arg Glu Phe Ile Ala Pro Val Thr Leu Lys Val Phe Ala
 305 310 315 320
 Gly Tyr Tyr Thr Lys Gly Phe Ala Leu Leu Asn Phe Val Val Lys Tyr
 325 330 335
 Ser Pro Glu Arg Gln Arg Ser Leu Arg Pro His His Asp Ala Ser Thr
 340 345 350
 Phe Thr Ile Asn Ile Ala Leu Asn Asn Val Gly Glu Asp Phe Gln Gly
 355 360 365
 Gly Gly Cys Lys Phe Leu Arg Tyr Asn Cys Ser Ile Glu Ser Pro Arg
 370 375 380
 Lys Gly Trp Ser Phe Met His Pro Gly Arg Leu Thr His Leu His Glu
 385 390 395 400
 Gly Leu Pro Val Lys Asn Gly Thr Arg Tyr Ile Ala Val Ser Phe Ile
 405 410 415
 Asp Pro

<210> 3596

<211> 223

<212> PRT

<213> Homo sapiens

<400> 3596

Met Pro Val Leu Pro Pro Cys Val Leu Gln Val Arg Asp Glu Gln His
 1 5 10 15
 Gln Cys Pro Leu Gly Asn Leu Lys Val Pro Leu Ser Gln Leu Leu Thr
 20 25 30
 Ser Glu Asp Met Thr Val Ser Gln Arg Phe Gln Leu Gly Asn Ser Gly
 35 40 45
 Pro Asn Ser Thr Ile Lys Met Lys Ile Ala Leu Arg Val Leu His Leu

50	55	60			
Glu Lys Arg Glu Arg Pro Pro Asp His Gln His Ser Ala Gln Val Lys					
65	70	75	80		
Arg Pro Ser Val Ser Lys Glu Gly Arg Lys Thr Ser Ile Lys Ser His					
	85	90	95		
Met Ser Gly Ser Pro Gly Pro Gly Gly Ser Asn Thr Ala Pro Ser Thr					
100	105	110			
Pro Val Ile Gly Gly Ser Asp Lys Pro Gly Met Glu Glu Lys Ala Gln					
115	120	125			
Pro Pro Glu Ala Gly Pro Gln Gly Leu His Asp Leu Gly Arg Ser Ser					
130	135	140			
Ser Ser Leu Leu Ala Ser Pro Gly His Ile Ser Val Lys Glu Pro Thr					
145	150	155	160		
Pro Ser Ile Ala Ser Asp Ile Ser Leu Pro Ile Ala Thr Gln Glu Leu					
	165	170	175		
Arg Gln Arg Leu Arg Gln Leu Glu Asn Gly Thr Thr Leu Gly Gln Ser					
180	185	190			
Pro Leu Gly Gln Ile Gln Leu Thr Ile Gln His Ser Ser Gln Lys Gln					
195	200	205			
Ala Tyr Arg Gly Arg Ala Cys Leu Gln Lys Pro His Cys Leu Leu					
210	215	220			

<210> 3597

<211> 310

<212> PRT

<213> Homo sapiens

<400> 3597

Met Asp Trp Thr Trp Arg Val Leu Cys Val Leu Ala Val Ala Pro Gly			
1	5	10	15
Ala Arg Leu Gln Val Gln Leu Thr Gln Ser Gly Ala Ala Leu Lys Lys			
20	25	30	
Pro Gly Ala Ser Leu Lys Leu Ser Cys Arg Ala Ser Ala Asp Ser Ser			
35	40	45	
Ile Thr Tyr Asn Ile His Trp Leu Arg Arg Pro Pro Gly Gln Gly Phe			

50	55	60
Glu Trp Leu Gly Lys Ile Asn Ser Arg Asp Ser Ile Thr Asn Ser Ala		
65	70	75
Pro Arg Phe Gln Gly Ser Val Thr Met Thr Arg Asp Arg Ser Ser Ser		
85	90	95
Thr Phe Tyr Leu Asp Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val		
100	105	110
Tyr Tyr Cys Thr Arg Ser Ile Trp Pro Leu Asp Tyr Phe Asp Ser Trp		
115	120	125
Gly Gln Gly Thr Gln Val Thr Val Ser Pro Ala Pro Thr Lys Ala Pro		
130	135	140
Asp Val Phe Pro Ile Ile Ser Gly Cys Arg His Pro Lys Asp Asn Ser		
145	150	155
Pro Val Val Leu Ala Cys Leu Ile Thr Gly Tyr His Pro Thr Ser Val		
165	170	175
Thr Val Thr Trp Tyr Met Gly Thr Gln Ser Gln Pro Gln Arg Thr Phe		
180	185	190
Pro Glu Ile Gln Arg Arg Asp Ser Tyr Tyr Met Thr Ser Ser Gln Leu		
195	200	205
Ser Thr Pro Leu Gln Gln Trp Arg Gln Gly Glu Tyr Lys Cys Val Val		
210	215	220
Gln His Thr Ala Ser Lys Ser Lys Lys Glu Ile Phe Arg Trp Pro Glu		
225	230	235
Ser Pro Lys Ala Gln Ala Ser Ser Val Pro Thr Ala Gln Pro Gln Ala		
245	250	255
Glu Gly Ser Leu Ala Lys Ala Thr Thr Ala Pro Ala Thr Thr Arg Asn		
260	265	270
Thr Gly Arg Gly Gly Glu Glu Lys Lys Lys Glu Lys Glu Lys Glu Glu		
275	280	285
Gln Glu Glu Arg Glu Thr Lys Thr Gln Ser Val Arg Ala Thr Pro Ser		
290	295	300
Leu Leu Ala Ser Thr Cys		
305	310	

<211> 324

<212> PRT

<213> Homo sapiens

<400> 3598

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Met Pro Thr Thr Pro Val Lys Ala Lys Arg Val Ser Thr Phe Gln Glu
  1              5              10              15
Phe Glu Ser Asn Thr Ser Asp Ala Trp Asp Ala Gly Glu Asp Asp Asp
          20              25              30
Glu Leu Leu Ala Met Ala Ala Glu Ser Leu Asn Ser Glu Val Val Met
          35              40              45
Glu Thr Ala Asn Arg Val Leu Arg Asn His Ser Gln Arg Gln Gly Arg
          50              55              60
Pro Thr Leu Gln Glu Gly Pro Gly Leu Gln Gln Lys Pro Arg Pro Glu
          65              70              75              80
Ala Glu Pro Pro Ser Pro Pro Ser Gly Asp Leu Arg Leu Val Lys Ser
          85              90              95
Val Ser Glu Ser His Thr Ser Cys Pro Ala Glu Ser Ala Ser Asp Ala
          100             105             110
Ala Pro Leu Gln Arg Ser Gln Ser Leu Pro His Ser Ala Thr Val Thr
          115             120             125
Leu Gly Gly Thr Ser Asp Pro Ser Thr Leu Ser Ser Ser Ala Leu Ser
          130             135             140
Glu Arg Glu Ala Ser Arg Leu Asp Lys Phe Lys Gln Leu Leu Ala Gly
          145             150             155             160
Pro Asn Thr Asp Leu Glu Glu Leu Arg Arg Leu Ser Trp Ser Gly Ile
          165             170             175
Pro Lys Pro Val Arg Pro Met Thr Trp Lys Leu Leu Ser Gly Tyr Leu
          180             185             190
Pro Ala Asn Val Asp Arg Arg Pro Ala Thr Leu Gln Arg Lys Gln Lys
          195             200             205
Glu Tyr Phe Ala Phe Ile Glu His Tyr Tyr Asp Ser Arg Asn Asp Glu
          210             215             220
Val His Gln Asp Thr Tyr Arg Gln Ile His Ile Asp Ile Pro Arg Met
          225             230             235             240
Ser Pro Glu Ala Leu Ile Leu Gln Pro Lys Val Thr Glu Ile Phe Glu

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245 250 255
 Arg Ile Leu Phe Ile Trp Ala Ile Arg His Pro Ala Ser Gly Tyr Val
 260 265 270
 Gln Gly Ile Asn Asp Leu Val Thr Pro Phe Phe Val Val Phe Ile Cys
 275 280 285
 Glu Tyr Ile Ala Phe Pro Gly Cys Gly Arg Pro Gln Ile Pro Ile Leu
 290 295 300
 Ala Val Ile Trp Arg Asp Glu Pro Tyr Pro Arg Thr Asp Glu Gln Ile
 305 310 315 320
 Ile Leu Arg Arg

<210> 3599

<211> 407

<212> PRT

<213> Homo sapiens

<400> 3599

Met Asn Met Ile Trp Arg Asn Ser Ile Ser Cys Leu Arg Leu Gly Lys
 1 5 10 15
 Val Pro His Arg Tyr Gln Ser Gly Tyr His Pro Val Ala Pro Leu Gly
 20 25 30
 Ser Arg Ile Leu Thr Asp Pro Ala Lys Val Phe Glu His Asn Met Trp
 35 40 45
 Asp His Met Gln Trp Ser Lys Glu Glu Glu Ala Ala Arg Lys Lys
 50 55 60
 Val Lys Glu Asn Ser Ala Val Arg Val Leu Leu Glu Glu Gln Val Lys
 65 70 75 80
 Tyr Glu Arg Glu Ala Ser Lys Tyr Trp Asp Thr Phe Tyr Lys Ile His
 85 90 95
 Lys Asn Lys Phe Phe Lys Asp Arg Asn Trp Leu Leu Arg Glu Phe Pro
 100 105 110
 Glu Ile Leu Pro Val Asp Gln Lys Pro Glu Glu Lys Ala Arg Glu Ser
 115 120 125
 Ser Trp Asp His Val Lys Thr Ser Ala Thr Asn Arg Phe Ser Arg Met

130	135	140	
His Cys Pro Thr Val	Pro Asp Glu Lys Asn His Tyr Glu Lys Ser Ser		
145	150	155	160
Gly Ser Ser Glu Gly Gln Ser Lys Thr Glu Ser Asp Phe Ser Asn Leu			
	165	170	175
Asp Ser Glu Lys His Lys Lys Gly Pro Met Glu Thr Gly Leu Phe Pro			
	180	185	190
Gly Ser Asn Ala Thr Phe Arg Ile Leu Glu Val Gly Cys Gly Ala Gly			
	195	200	205
Asn Ser Val Phe Pro Ile Leu Asn Thr Leu Glu Asn Ser Pro Glu Ser			
	210	215	220
Phe Leu Tyr Cys Cys Asp Phe Ala Ser Gly Ala Val Glu Leu Val Lys			
225	230	235	240
Ser His Ser Ser Tyr Arg Ala Thr Gln Cys Phe Ala Phe Val His Asp			
	245	250	255
Val Cys Asp Asp Gly Leu Pro Tyr Pro Phe Pro Asp Gly Ile Leu Asp			
	260	265	270
Val Ile Leu Leu Val Phe Val Leu Ser Ser Ile His Pro Asp Arg Met			
	275	280	285
Gln Gly Val Val Asn Arg Leu Ser Lys Leu Leu Lys Pro Gly Gly Met			
	290	295	300
Leu Leu Phe Arg Asp Tyr Gly Arg Tyr Asp Lys Thr Gln Leu Arg Phe			
305	310	315	320
Lys Lys Gly His Cys Leu Ser Glu Asn Phe Tyr Val Arg Gly Asp Gly			
	325	330	335
Thr Arg Ala Tyr Phe Phe Thr Lys Gly Glu Val His Ser Met Phe Cys			
	340	345	350
Lys Ala Ser Leu Asp Glu Lys Gln Asn Leu Val Asp Arg Arg Leu Gln			
	355	360	365
Val Asn Arg Lys Lys Gln Val Lys Met His Arg Val Trp Ile Gln Gly			
	370	375	380
Lys Phe Gln Lys Pro Leu His Gln Thr Gln Asn Ser Ser Asn Met Val			
385	390	395	400
Ser Thr Leu Leu Ser Gln Asp			
	405		

<210> 3600

<211> 144

<212> PRT

<213> Homo sapiens

<400> 3600

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Met Val Cys Pro Glu Phe Val Pro Ser Asp Val Gln Met Cys Leu Glu
  1              5              10              15
Phe Leu Pro Ser Gly Gly Phe Val Val Ser Leu Asp Phe Arg Ser Glu
              20              25              30
Ala Thr Glu Leu Cys Ser Val Thr Ala Leu Lys Gly Ala Arg Leu Glu
              35              40              45
Leu Leu Val Pro Pro Asp Gly Phe Val Ala Leu Leu Thr Ser Gly Met
              50              55              60
Lys Pro Gln Thr Leu Thr Val Ser Val Thr Ala His Lys Gly Ser Ala
              65              70              75              80
Asp Pro Glu Glu Ala Ala Ala Lys Phe Ile Val Lys Ser Lys Arg Thr
              85              90              95
Lys Leu Pro Gln His Glu Thr Ala Pro Gln Arg Ile Ala Thr Ala Ala
              100             105             110
Trp Val Ala Ser Phe Tyr Ser Leu Thr Trp Pro His Pro His Pro Ala
              115             120             125
Asp Trp Ser Ile Leu Gln Arg Gly Asp Trp Ser Val Phe Thr Gln Cys
              130             135             140

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<210> 3601

<211> 150

<212> PRT

<213> Homo sapiens

<400> 3601

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Met Gln Ser Leu Pro Thr Ala Pro Ser Phe Gly Val Ser Thr Gly Leu
  1              5              10              15
Leu Ala Ala Ala Ala Phe Tyr Gln Thr Ser Gln Pro Pro Ser Pro Pro

```

20 25 30
 Leu Gly Ser Ser Ser Pro Thr Trp Pro Ala Arg Val Thr Leu Lys Tyr
 35 40 45
 Lys Ser Asp Pro Asn Thr Ser Leu Leu Lys Thr His Gln Val Leu Pro
 50 55 60
 Pro His Ser Met Gln Cys Lys Ser Ser Pro Trp Ser Ser Ser Ile Ser
 65 70 75 80
 Pro Ser Pro Ser Ala Ser Ser Leu Pro His Leu Leu Leu Ser Ser Tyr
 85 90 95
 Thr Gly Leu Cys Cys Thr Trp Asp Met Pro Ser Lys Thr Gln Pro Trp
 100 105 110
 Gly Leu Cys Ser Arg Pro Leu Pro Gly Cys Ser Ser Pro Ser Tyr Pro
 115 120 125
 Gln Val Trp Leu Pro Asp Phe Ile Gln Arg Pro Pro Ser Gln Glu Asp
 130 135 140
 Thr Leu Asp Cys Phe Val
 145 150

<210> 3602

<211> 163

<212> PRT

<213> Homo sapiens

<400> 3602

Met Gly Ser Ser Leu Gly Leu Cys Leu Gly Lys Ala Pro Ser Ser Ser
 1 5 10 15
 Gln Leu Phe Leu Phe Phe Ala Met Gly Ser Asp Val Gln Pro Gly Thr
 20 25 30
 Glu Met Glu Ile Val Val Glu Glu Thr Ile Ser Val Arg Asp Cys Leu
 35 40 45
 Lys Leu Met Leu Lys Lys Ser Gly Leu Gln Gly Asp Ala Trp His Leu
 50 55 60
 Arg Lys Met Asp Trp Cys Tyr Glu Ala Gly Glu Pro Leu Cys Glu Glu
 65 70 75 80
 Asp Ala Thr Leu Lys Glu Leu Leu Ile Cys Ser Gly Asp Thr Leu Leu

	85		90		95										
Leu	Ile	Glu	Gly	Gln	Leu	Pro	Pro	Leu	Gly	Phe	Leu	Lys	Val	Pro	Ile
	100		105		110										
Trp	Trp	Tyr	Gln	Leu	Gln	Gly	Pro	Ser	Gly	His	Trp	Glu	Ser	His	Gln
	115		120		125										
Asp	Gln	Thr	Asn	Cys	Thr	Ser	Ser	Trp	Gly	Arg	Val	Trp	Arg	Ala	Thr
	130		135		140										
Ser	Ser	Gln	Gly	Glu	Asn	Arg	Met	Gly	Phe	Gln	Gln	Pro	Val	His	His
145			150		155									160	
Lys	Glu	Lys													

<210> 3603

<211> 165

<212> PRT

<213> Homo sapiens

<400> 3603

Met	Val	Thr	Lys	Trp	Trp	Gly	Gln	Asp	Pro	Pro	Val	Gln	Leu	Arg	Ser
1			5						10					15	
Gln	Leu	Met	Leu	Trp	Ile	Met	Glu	Leu	Ile	Leu	Trp	Lys	Phe	Gln	Ser
		20						25					30		
Ser	Val	Val	Gly	Ser	Ser	Val	Val	Thr	Trp	Lys	Ile	Ser	Asp	Val	Ala
		35					40					45			
Gly	Pro	His	Gly	Asp	His	Ser	Cys	Ser	Leu	Gln	His	Leu	Glu	Gln	Ile
	50					55					60				
Ile	Gly	Ser	Val	Ser	Asn	Tyr	Pro	Arg	Tyr	Thr	Gly	Ser	Arg	Ser	Cys
65					70					75				80	
Asp	Arg	Gly	Glu	Asn	Pro	Val	Ser	Leu	Ser	Lys	Arg	Ile	Lys	Cys	Thr
			85						90					95	
Trp	Met	Leu	Gly	Ala	Ser	Gly	Phe	Pro	Pro	Arg	Cys	Pro	Ser	Gly	Arg
		100							105					110	
Asp	His	Ser	Arg	Asp	His	Pro	Gly	Lys	Ser	Gln	Val	Pro	Ala	Leu	Glu
		115							120					125	

Leu Ala Asn Gln Leu Ala Ala Trp Gly Leu Trp Ser Ser Val Val Lys
 130 135 140
 Ser Trp Gly Phe Arg Ala Gly Glu Thr Glu Ala Pro Ile Ser Ala Leu
 145 150 155 160
 Ser Ser Ala His Ala
 165

<210> 3604

<211> 107

<212> PRT

<213> Homo sapiens

<400> 3604

Met Val Ser Cys Asp Cys Gly Val Cys Glu Ser Arg Ser Ile Leu Val
 1 5 10 15
 Leu Cys Ala Ser Leu Phe Ala Val Leu Gly Gly Leu Ala Arg Phe Arg
 20 25 30
 Ile Arg Gly Thr Gly Gly Leu Glu Arg Gly Met Arg Trp Pro Ser Arg
 35 40 45
 Ala Arg Arg Met Thr Ala Asn Trp Cys Leu Gly Gly Leu Ser Arg Arg
 50 55 60
 Asn Cys Gly Ala Arg Ala Ala Leu Cys Pro Leu Pro Arg Ser Asn Leu
 65 70 75 80
 Trp Arg Pro Phe Thr Ala Leu Ala Leu Val Gly Ser Arg Gly Lys Glu
 85 90 95
 Phe Gly Asn Val Trp Leu Cys Val Thr Met Lys
 100 105

<210> 3605

<211> 402

<212> PRT

<213> Homo sapiens

<400> 3605

Met	Cys	Glu	Leu	Asp	Ile	Leu	His	Asp	Ser	Leu	Tyr	Gln	Phe	Cys	Pro
1				5					10					15	
Glu	Leu	His	Leu	Lys	Arg	Leu	Asn	Ser	Leu	Thr	Leu	Ala	Cys	His	Ala
			20					25					30		
Leu	Leu	Asp	Cys	Lys	Thr	Leu	Thr	Leu	Thr	Glu	Leu	Gly	Arg	Asn	Leu
		35					40					45			
Pro	Thr	Lys	Ala	Arg	Thr	Lys	His	Asn	Ile	Lys	Arg	Ile	Asp	Arg	Leu
	50					55				60					
Leu	Gly	Asn	Arg	His	Leu	His	Lys	Glu	Arg	Leu	Ala	Val	Tyr	Arg	Trp
65				70					75					80	
His	Ala	Ser	Phe	Ile	Cys	Ser	Gly	Asn	Thr	Met	Pro	Ile	Val	Leu	Val
			85					90					95		
Asp	Trp	Ser	Asp	Ile	Arg	Glu	Gln	Lys	Arg	Leu	Met	Val	Leu	Arg	Ala
		100						105				110			
Ser	Val	Ala	Leu	His	Gly	Arg	Ser	Val	Thr	Leu	Tyr	Glu	Lys	Ala	Phe
	115					120					125				
Pro	Leu	Ser	Glu	Gln	Cys	Ser	Lys	Lys	Ala	His	Asp	Gln	Phe	Leu	Ala
	130					135				140					
Asp	Leu	Ala	Ser	Ile	Leu	Pro	Ser	Asn	Thr	Thr	Pro	Leu	Ile	Val	Ser
145				150					155				160		
Asp	Ala	Gly	Phe	Lys	Val	Pro	Trp	Tyr	Lys	Ser	Val	Glu	Lys	Leu	Gly
		165						170				175			
Trp	Tyr	Trp	Leu	Ser	Arg	Val	Arg	Gly	Lys	Val	Gln	Tyr	Ala	Asp	Leu
		180						185				190			
Gly	Ala	Glu	Asn	Trp	Lys	Pro	Ile	Ser	Asn	Leu	His	Asp	Met	Ser	Ser
	195					200					205				
Ser	His	Ser	Lys	Thr	Leu	Gly	Tyr	Lys	Arg	Leu	Thr	Lys	Ser	Asn	Pro
	210					215				220					
Ile	Ser	Cys	Gln	Ile	Leu	Leu	Tyr	Lys	Ser	Arg	Ser	Lys	Gly	Arg	Lys
225				230					235				240		
Asn	Gln	Arg	Ser	Thr	Arg	Thr	His	Cys	His	His	Pro	Ser	Pro	Lys	Ile
		245						250				255			
Tyr	Ser	Ala	Ser	Ala	Lys	Glu	Pro	Trp	Val	Leu	Ala	Thr	Asn	Leu	Pro
		260						265				270			
Val	Glu	Ile	Arg	Thr	Pro	Lys	Gln	Leu	Val	Asn	Ile	Tyr	Ser	Lys	Arg
	275						280					285			

Met Gln Ile Glu Glu Thr Phe Arg Asp Leu Lys Ser Pro Ala Tyr Gly
 290 295 300
 Leu Gly Leu Arg His Ser Arg Thr Ser Ser Ser Glu Arg Phe Asp Ile
 305 310 315 320
 Met Leu Leu Ile Ala Leu Met Leu Gln Leu Thr Cys Trp Leu Ala Gly
 325 330 335
 Val His Ala Gln Lys Gln Gly Trp Asp Lys His Phe Gln Ala Asn Thr
 340 345 350
 Val Arg Asn Arg Asn Val Leu Ser Thr Val Arg Leu Gly Met Glu Val
 355 360 365
 Leu Arg His Ser Gly Tyr Thr Ile Thr Arg Glu Asp Leu Leu Val Ala
 370 375 380
 Ala Thr Leu Leu Ala Gln Asn Leu Phe Thr His Gly Tyr Ala Leu Gly
 385 390 395 400
 Lys Leu

<210> 3606

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3606

Met Leu Ser Leu Leu Phe Leu Cys Thr Leu His Leu Ser Leu Ser Leu
 1 5 10 15
 Pro Ser Leu Arg Leu Thr Leu Thr Pro Ile Arg Leu Ser Ser Leu Pro
 20 25 30
 Gly Leu Cys Cys Arg Lys Val Pro Gly Thr Ala Leu Ile Thr Ser Ala
 35 40 45
 Lys Leu Phe Leu Met Ile Tyr Phe Leu Ser Thr Pro Pro Leu Leu Thr
 50 55 60
 Leu Phe Asn Ile Leu Met Thr Phe Phe Phe Val Ala Pro Pro Leu Asn
 65 70 75 80
 Leu Leu Asn Lys Thr Tyr Phe Cys Ser Phe Ser Ile Tyr Ser Pro Lys
 85 90 95

Asp Ile Gly Tyr Pro Pro Pro Lys Leu Lys Phe Leu Leu His Pro Leu
 100 105 110
 Pro Thr Ser Ala
 115

<210> 3607

<211> 217

<212> PRT

<213> Homo sapiens

<400> 3607

Met Thr Phe Ser Arg Cys Gln Leu Pro Cys Gln Pro Arg Ser Pro Met
 1 5 10 15
 Glu Thr Val Glu Thr Asn Trp Asp His Val Ser Arg Trp Lys Lys Gly
 20 25 30
 Gly Arg Gly Arg Gly Asp His Tyr Cys Gln Val Ile Gln Lys Arg Ala
 35 40 45
 Glu Pro Pro Ala Leu Arg Arg Glu Thr Leu Asp Ser Gln Gly Asp Ser
 50 55 60
 Gly Lys Gly Asp Ser Ala Gln Thr Pro Ser Val Pro Glu Ala Asn Ser
 65 70 75 80
 Trp Lys Thr Gly Ala Arg Ala Asn Leu Asn Lys Asn Gly Gly Gly Lys
 85 90 95
 Gly Gly Lys Glu Gly Ser Cys Glu Leu Pro Glu Val Gly Gln Gly Ala
 100 105 110
 Pro Gln Arg Met Gly Cys Tyr Glu Ser Glu Asn Met Ala Thr His Pro
 115 120 125
 Ala Ser Phe Ile Tyr Tyr Gln Pro Pro Gln Asn Trp Cys Leu Lys Thr
 130 135 140
 Ile Ile Ile Tyr Val Met Ser Leu Cys Gly Glu Leu Gly Gly Pro Ser
 145 150 155 160
 Ala Ser Pro Ser Leu Ala Val Ser Ala Val Thr Gly Asp Trp Pro Gly
 165 170 175
 Leu Ala Ser Leu Pro Gly Ser Cys Pro Gly Arg Gly Gly Cys Leu Leu
 180 185 190

Ser Ala Glu Thr Val Ser Arg Ser Ile Ser Thr Ser Pro His Arg Thr
 195 200 205
 Ser Ser Cys Thr Thr Gly Ile Ser Ala
 210 215

<210> 3608

<211> 777

<212> PRT

<213> Homo sapiens

<400> 3608

Met Leu Asp Met Ser Phe Lys Asp Ala Glu Arg Gly Asp Asp Thr Ser
 1 5 10 15
 Cys Glu Asn Leu Leu Asp Ala Phe Ser Ile Lys Leu Ser Glu Thr His
 20 25 30
 Gly Tyr Gly Val Gln Glu Glu Phe Thr Glu Glu Asn Lys Leu Leu Glu
 35 40 45
 Ala Cys Ile Phe Lys Asn Asn Glu Leu Leu Lys Asn Ile Gln Asp Val
 50 55 60
 Gln Ser Gln Ile Ser Lys Ile Gly Leu Lys Asp Pro Thr Val Pro Ala
 65 70 75 80
 Val Lys His Arg Lys Lys Ser Leu Ile Arg Leu Asp Lys Val Leu Asp
 85 90 95
 Glu Tyr Glu Glu Glu Lys Arg His Leu Gln Glu Met Ala Asn Ser Leu
 100 105 110
 Pro His Phe Lys Asp Gly Arg Glu Lys Thr Val Asn Gln Gln Cys Gln
 115 120 125
 Asn Thr Val Val Leu Trp Glu Asn Thr Lys Ala Leu Val Thr Glu Cys
 130 135 140
 Leu Glu Gln Cys Gly Arg Val Leu Glu Leu Leu Lys Gln Tyr Gln Asn
 145 150 155 160
 Phe Lys Ser Ile Leu Thr Thr Leu Ile Gln Lys Glu Glu Ser Val Ile
 165 170 175
 Ser Leu Gln Ala Ser Tyr Met Gly Lys Glu Asn Leu Lys Lys Arg Ile
 180 185 190

Ala Glu Ile Glu Ile Val Lys Glu Glu Phe Asn Glu His Leu Glu Val			
195	200	205	
Val Asp Lys Ile Asn Gln Val Cys Lys Asn Leu Gln Phe Tyr Leu Asn			
210	215	220	
Lys Met Lys Thr Phe Glu Glu Pro Pro Phe Glu Lys Glu Ala Asn Ile			
225	230	235	240
Ile Val Asp Arg Trp Leu Asp Ile Asn Glu Lys Thr Glu Asp Tyr Tyr			
245	250	255	
Glu Asn Leu Gly Arg Ala Leu Ala Leu Trp Asp Lys Leu Phe Asn Leu			
260	265	270	
Lys Asn Val Ile Asp Glu Trp Thr Glu Lys Ala Leu Gln Lys Met Glu			
275	280	285	
Leu His Gln Leu Thr Glu Glu Asp Arg Glu Arg Leu Lys Glu Glu Leu			
290	295	300	
Gln Val His Glu Gln Lys Thr Ser Glu Phe Ser Arg Arg Val Ala Glu			
305	310	315	320
Ile Gln Phe Leu Leu Gln Ser Ser Glu Ile Pro Leu Glu Leu Gln Val			
325	330	335	
Met Glu Ser Ser Ile Leu Asn Lys Met Glu His Val Gln Lys Cys Leu			
340	345	350	
Thr Gly Glu Ser Asn Cys His Ala Leu Ser Gly Ser Thr Ala Glu Leu			
355	360	365	
Arg Glu Asp Leu Asp Gln Ala Lys Thr Gln Ile Gly Met Thr Glu Ser			
370	375	380	
Leu Leu Lys Ala Leu Ser Pro Ser Asp Ser Leu Glu Ile Phe Thr Lys			
385	390	395	400
Leu Glu Glu Ile Gln Gln Gln Ile Leu Gln Gln Lys His Ser Met Ile			
405	410	415	
Leu Leu Glu Asn Gln Ile Gly Cys Leu Thr Pro Glu Leu Ser Glu Leu			
420	425	430	
Lys Lys Gln Tyr Glu Ser Val Ser Asp Leu Phe Asn Thr Lys Lys Ser			
435	440	445	
Val Leu Gln Asp His Phe Ser Lys Leu Leu Asn Asp Gln Cys Lys Asn			
450	455	460	
Phe Asn Asp Trp Phe Ser Asn Ile Lys Val Asn Leu Lys Glu Cys Phe			
465	470	475	480

Glu Ser Ser Glu Thr Lys Lys Ser Val Glu Gln Lys Leu Gln Lys Leu			
485	490	495	
Ser Asp Phe Leu Thr Leu Glu Gly Arg Asn Ser Lys Ile Lys Gln Val			
500	505	510	
Asp Ser Val Leu Lys His Val Lys Lys His Leu Pro Lys Ala His Val			
515	520	525	
Lys Glu Leu Ile Ser Trp Leu Val Gly Gln Glu Phe Glu Leu Glu Lys			
530	535	540	
Met Glu Ser Ile Cys Gln Ala Arg Ala Lys Glu Leu Glu Asp Ser Leu			
545	550	555	560
Gln Gln Leu Leu Arg Leu Gln Asp Asp His Arg Asn Leu Arg Lys Trp			
565	570	575	
Leu Thr Asn Gln Glu Glu Lys Trp Lys Gly Thr Glu Glu Pro Gly Glu			
580	585	590	
Lys Thr Glu Leu Phe Cys Gln Ala Leu Ala Arg Lys Arg Glu Gln Phe			
595	600	605	
Glu Ser Val Ala Gln Leu Asn Asn Ser Leu Lys Glu Tyr Gly Phe Thr			
610	615	620	
Glu Glu Glu Glu Ile Ile Met Glu Ala Thr Cys Leu Met Asp Arg Tyr			
625	630	635	640
Gln Thr Leu Leu Arg Gln Leu Ser Glu Ile Glu Glu Glu Asp Lys Leu			
645	650	655	
Leu Pro Thr Glu Asp Gln Ser Phe Asn Asp Leu Ala His Gly Val Ile			
660	665	670	
His Trp Ile Lys Glu Ile Lys Glu Ser Leu Met Val Leu Asn Ser Ser			
675	680	685	
Glu Gly Lys Met Pro Leu Glu Glu Arg Ile Gln Lys Ile Lys Glu Ile			
690	695	700	
Ile Leu Leu Lys Pro Glu Gly Asp Ala Arg Ile Glu Thr Ile Thr Lys			
705	710	715	720
Gln Ala Glu Ser Ser Glu Ala Pro Leu Val Gln Lys Thr Leu Thr Asp			
725	730	735	
Ile Ser Asn Gln Trp Asp Asn Thr Leu His Leu Ala Ser Thr Tyr Leu			
740	745	750	
Ser His Gln Glu Lys Leu Leu Leu Glu Gly Glu Lys Tyr Leu Gln Ser			
755	760	765	

Lys Glu Asp Leu Arg Leu Met Leu Ile
 770 775

<210> 3609

<211> 274

<212> PRT

<213> Homo sapiens

<400> 3609

Met Leu Glu Asp Ile Ala Ser Pro Arg Pro Pro Ala Glu Gly Phe Ile
 1 5 10 15
 Asp Glu Thr Pro Asn Phe Ile Ile Pro Ala Gln Arg Ala Glu Pro Met
 20 25 30
 Arg Ile Val Arg Gln Pro Thr Pro Pro Gly Asp Leu Glu Pro Pro
 35 40 45
 Phe Gln Pro Ser Ala Leu Pro Ala Asp Pro Leu Glu Ser Pro Pro Thr
 50 55 60
 Ala Pro Asp Pro Ala Leu Glu Leu Pro Ser Thr Pro Pro Pro Ser Ser
 65 70 75 80
 Leu Leu Arg Pro Arg Leu Ser Pro Trp Gly Leu Ala Pro Leu Phe Arg
 85 90 95
 Ser Val Arg Ser Lys Leu Glu Ser Phe Ala Asp Ile Phe Leu Thr Pro
 100 105 110
 Asn Lys Thr Pro Gln Pro Pro Pro Pro Ser Pro Pro Met Lys Leu Glu
 115 120 125
 Leu Lys Ile Ala Ile Ser Glu Ala Glu Gln Ser Gly Ala Ala Glu Gly
 130 135 140
 Thr Ala Ser Val Ser Pro Arg Pro Pro Ile Arg Gln Trp Arg Thr Gln
 145 150 155 160
 Asp His Asn Thr Pro Ala Leu Leu Pro Lys Pro Ser Leu Gly Arg Ser
 165 170 175
 Tyr Ser Cys Pro Asp Leu Gly Pro Pro Gly Pro Gly Thr Cys Thr Trp
 180 185 190
 Pro Pro Ala Pro Pro Gln Pro Ser Arg Pro Arg Pro Arg Arg His Thr
 195 200 205

Val Gly Gly Gly Glu Met Ala Arg Ala Pro Pro Pro Pro Arg Pro Cys
 210 215 220
 Leu Arg Lys Glu Val Phe Pro Leu Gly Gly Val Gly Ala Ser Pro Ser
 225 230 235 240
 Leu Thr Thr Ser Cys Ser Ser Thr Ala Ser Thr Ser Phe Ser Gly Pro
 245 250 255
 Ala Glu Pro Arg Glu Gly Ala Lys Ser Leu Lys Gly Pro Gly Ala Phe
 260 265 270
 Arg Thr

<210> 3610

<211> 497

<212> PRT

<213> Homo sapiens

<400> 3610

Met Asp Asn Arg Gln Asn Val Thr Pro Ala Leu Ile Phe Ala Ile Thr
 1 5 10 15
 Val Ala Thr Ile Gly Ser Phe Gln Phe Gly Tyr Asn Thr Gly Val Ile
 20 25 30
 Asn Ala Pro Glu Thr Ile Ile Lys Glu Phe Ile Asn Lys Thr Leu Thr
 35 40 45
 Asp Lys Ala Asn Ala Pro Pro Ser Glu Val Leu Leu Thr Asn Leu Trp
 50 55 60
 Ser Leu Ser Val Ala Ile Phe Ser Val Gly Gly Met Ile Gly Ser Phe
 65 70 75 80
 Ser Val Gly Leu Phe Val Asn Arg Phe Gly Arg Arg Asn Ser Met Leu
 85 90 95
 Ile Val Asn Leu Leu Ala Ala Thr Gly Gly Cys Leu Met Gly Leu Cys
 100 105 110
 Lys Ile Ala Glu Ser Val Glu Met Leu Ile Leu Gly Arg Leu Val Ile
 115 120 125
 Gly Leu Phe Cys Gly Leu Cys Thr Gly Phe Val Pro Met Tyr Ile Gly
 130 135 140

Glu Ile Ser Pro Thr Ala Leu Arg Gly Ala Phe Gly Thr Leu Asn Gln
 145 150 155 160
 Leu Gly Ile Val Ile Gly Ile Leu Val Ala Gln Ile Phe Gly Leu Glu
 165 170 175
 Leu Ile Leu Gly Ser Glu Glu Leu Trp Pro Val Leu Leu Gly Phe Thr
 180 185 190
 Ile Leu Pro Ala Ile Leu Gln Ser Ala Ala Leu Pro Cys Cys Pro Glu
 195 200 205
 Ser Pro Arg Phe Leu Leu Ile Asn Arg Lys Lys Glu Glu Asn Ala Thr
 210 215 220
 Arg Ile Leu Gln Arg Leu Trp Gly Thr Gln Asp Val Ser Gln Asp Ile
 225 230 235 240
 Gln Glu Met Lys Asp Glu Ser Ala Arg Met Ser Gln Glu Lys Gln Val
 245 250 255
 Thr Val Leu Glu Leu Phe Arg Val Ser Ser Tyr Arg Gln Pro Ile Ile
 260 265 270
 Ile Ser Ile Val Leu Gln Leu Ser Gln Gln Leu Ser Gly Ile Asn Ala
 275 280 285
 Val Phe Tyr Tyr Ser Thr Gly Ile Phe Lys Asp Ala Gly Val Gln Gln
 290 295 300
 Pro Ile Tyr Ala Thr Ile Ser Ala Gly Val Val Asn Thr Ile Phe Thr
 305 310 315 320
 Leu Leu Ser Leu Phe Leu Val Glu Arg Ala Gly Arg Arg Thr Leu His
 325 330 335
 Met Ile Gly Leu Gly Gly Met Ala Phe Cys Ser Thr Leu Met Thr Val
 340 345 350
 Ser Leu Leu Leu Lys Asn His Tyr Asn Gly Met Ser Phe Val Cys Ile
 355 360 365
 Gly Ala Ile Leu Val Phe Val Ala Cys Phe Glu Ile Gly Pro Gly Pro
 370 375 380
 Ile Pro Trp Phe Ile Val Ala Glu Leu Phe Ser Gln Gly Pro Arg Pro
 385 390 395 400
 Ala Ala Met Ala Val Ala Gly Cys Ser Asn Trp Thr Ser Asn Phe Leu
 405 410 415
 Val Gly Leu Leu Phe Pro Ser Ala Ala Tyr Tyr Leu Gly Ala Tyr Val
 420 425 430

Phe Ile Ile Phe Thr Gly Phe Leu Ile Thr Phe Leu Ala Phe Thr Phe
 435 440 445
 Phe Lys Val Pro Glu Thr Arg Gly Arg Thr Phe Glu Asp Ile Thr Arg
 450 455 460
 Ala Phe Glu Gly Gln Ala His Gly Ala Asp Arg Ser Gly Lys Asp Gly
 465 470 475 480
 Val Met Gly Met Asn Ser Ile Glu Pro Ala Lys Glu Thr Thr Thr Asn
 485 490 495
 Val

<210> 3611

<211> 888

<212> PRT

<213> Homo sapiens

<400> 3611

Met Leu Leu Asn Gly Asp Cys Pro Glu Ser Leu Lys Lys Glu Ala Ala
 1 5 10 15
 Ala Ala Glu Pro Pro Arg Glu Asn Gly Leu Asp Glu Ala Gly Pro Gly
 20 25 30
 Asp Glu Thr Thr Gly Gln Glu Val Ile Val Ile Gln Asp Thr Gly Phe
 35 40 45
 Ser Val Lys Ile Leu Ala Pro Gly Ile Glu Pro Phe Ser Leu Gln Val
 50 55 60
 Ser Pro Gln Glu Met Val Gln Glu Ile His Gln Val Leu Met Asp Arg
 65 70 75 80
 Glu Asp Thr Cys His Arg Thr Cys Phe Ser Leu His Leu Asp Gly Asn
 85 90 95
 Val Leu Asp His Phe Ser Glu Leu Arg Ser Val Glu Gly Leu Gln Glu
 100 105 110
 Gly Ser Val Leu Arg Val Val Glu Glu Pro Tyr Thr Val Arg Glu Ala
 115 120 125
 Arg Ile His Val Arg His Val Arg Asp Leu Leu Lys Ser Leu Asp Pro
 130 135 140

Ser Asp Ala Phe Asn Gly Val Asp Cys Asn Ser Leu Ser Phe Leu Ser
 145 150 155 160
 Val Phe Thr Asp Gly Asp Leu Gly Asp Ser Gly Lys Arg Lys Lys Gly
 165 170 175
 Leu Glu Met Asp Pro Ile Asp Cys Thr Pro Pro Glu Tyr Ile Leu Pro
 180 185 190
 Gly Ser Arg Glu Arg Pro Leu Cys Pro Leu Gln Pro Gln Asn Arg Asp
 195 200 205
 Trp Lys Pro Leu Gln Cys Leu Lys Val Leu Thr Thr Ser Gly Trp Asn
 210 215 220
 Pro Pro Pro Gly Asn Arg Lys Met His Gly Asp Leu Met Tyr Leu Phe
 225 230 235 240
 Val Ile Thr Ala Glu Asp Arg Gln Val Ser Ile Thr Ala Ser Thr Arg
 245 250 255
 Gly Phe Tyr Leu Asn Gln Ser Thr Ala Tyr His Phe Asn Pro Lys Pro
 260 265 270
 Ala Ser Pro Arg Phe Leu Ser His Ser Leu Val Glu Leu Leu Asn Gln
 275 280 285
 Ile Ser Pro Thr Phe Lys Lys Asn Phe Ala Val Leu Gln Lys Lys Arg
 290 295 300
 Val Gln Arg His Pro Phe Glu Arg Ile Ala Thr Pro Phe Gln Val Tyr
 305 310 315 320
 Ser Trp Thr Ala Pro Gln Ala Glu His Ala Met Asp Cys Val Arg Ala
 325 330 335
 Glu Asp Ala Tyr Thr Ser Arg Leu Gly Tyr Glu Glu His Ile Pro Gly
 340 345 350
 Gln Thr Arg Asp Trp Asn Glu Glu Leu Gln Thr Thr Arg Glu Leu Pro
 355 360 365
 Arg Lys Asn Leu Pro Glu Arg Leu Leu Arg Glu Arg Ala Ile Phe Lys
 370 375 380
 Val His Ser Asp Phe Thr Ala Ala Ala Thr Arg Gly Ala Met Ala Val
 385 390 395 400
 Ile Asp Gly Asn Val Met Ala Ile Asn Pro Ser Glu Glu Thr Lys Met
 405 410 415
 Gln Met Phe Ile Trp Asn Asn Ile Phe Phe Ser Leu Gly Phe Asp Val
 420 425 430

Arg Asp His Tyr Lys Asp Phe Gly Gly Asp Val Ala Ala Tyr Val Ala
 435 440 445
 Pro Thr Asn Asp Leu Asn Gly Val Arg Thr Tyr Asn Ala Val Asp Val
 450 455 460
 Glu Gly Leu Tyr Thr Leu Gly Thr Val Val Val Asp Tyr Arg Gly Tyr
 465 470 475 480
 Arg Val Thr Ala Gln Ser Ile Ile Pro Gly Ile Leu Glu Arg Asp Gln
 485 490 495
 Glu Gln Ser Val Ile Tyr Gly Ser Ile Asp Phe Gly Lys Thr Val Val
 500 505 510
 Ser His Pro Arg Tyr Leu Glu Leu Leu Glu Arg Thr Ser Arg Pro Leu
 515 520 525
 Lys Ile Leu Arg His Gln Val Leu Asn Asp Arg Asp Glu Glu Val Glu
 530 535 540
 Leu Cys Ser Ser Val Glu Cys Lys Gly Ile Ile Gly Asn Asp Gly Arg
 545 550 555 560
 His Tyr Ile Leu Asp Leu Leu Arg Thr Phe Pro Pro Asp Leu Asn Phe
 565 570 575
 Leu Pro Val Pro Gly Glu Glu Leu Pro Glu Glu Cys Ala Arg Ala Gly
 580 585 590
 Phe Pro Arg Ala His Arg His Lys Leu Cys Cys Leu Arg Gln Glu Leu
 595 600 605
 Val Gly Ala Phe Val Glu His Arg Tyr Leu Leu Phe Met Lys Leu Ala
 610 615 620
 Ala Leu Gln Leu Met Gln Gln Asn Ala Ser Gln Leu Glu Thr Pro Ser
 625 630 635 640
 Ser Leu Glu Asn Gly Gly Pro Ser Ser Leu Glu Ser Lys Ser Glu Asp
 645 650 655
 Pro Pro Gly Gln Glu Ala Gly Ser Glu Glu Glu Gly Ser Ser Ala Ser
 660 665 670
 Gly Leu Ala Lys Val Lys Glu Leu Ala Glu Thr Ile Ala Ala Asp Asp
 675 680 685
 Gly Thr Asp Pro Arg Ser Arg Glu Val Ile Arg Asn Ala Cys Lys Ala
 690 695 700
 Val Gly Ser Ile Ser Ser Thr Ala Phe Asp Ile Arg Phe Asn Pro Asp

705 710 715 720
 Ile Phe Ser Pro Gly Val Arg Phe Pro Glu Ser Cys Gln Asp Glu Val
 725 730 735
 Arg Asp Gln Lys Gln Leu Leu Lys Asp Ala Ala Ala Phe Leu Leu Ser
 740 745 750
 Cys Gln Ile Pro Gly Leu Val Lys Asp Cys Met Glu His Ala Val Leu
 755 760 765
 Pro Val Asp Gly Ala Thr Leu Ala Glu Val Met Arg Gln Arg Gly Ile
 770 775 780
 Asn Met Arg Tyr Leu Gly Lys Val Leu Glu Leu Val Leu Arg Ser Pro
 785 790 795 800
 Ala Arg His Gln Leu Asp His Val Phe Lys Ile Gly Ile Gly Glu Leu
 805 810 815
 Ile Thr Arg Ser Ala Lys His Ile Phe Lys Thr Tyr Leu Gln Gly Val
 820 825 830
 Glu Leu Ser Gly Leu Ser Ala Ala Ile Ser His Phe Leu Asn Cys Phe
 835 840 845
 Leu Ser Ser Tyr Pro Asn Pro Val Ala His Leu Pro Ala Asp Glu Leu
 850 855 860
 Val Ser Lys Glu Arg Asn Lys Arg Arg Lys Thr Gly Pro Arg Gly Leu
 865 870 875 880
 Gln Ile Thr Gln Pro Gly Leu Ser
 885

<210> 3612

<211> 101

<212> PRT

<213> Homo sapiens

<400> 3612

Met Arg Asp Thr Gly Ser Cys Leu Ser Leu Asn Ile Pro Pro Ala Gly
 1 5 10 15
 Gly His Lys Gly Ala Asp Ala Ala Asp Val Ser Ser Gly Ala Met Gly
 20 25 30
 His Arg His Pro Ala Gly Ser Glu Ala Ala Glu Ser Pro Gly Val Thr

35					40					45									
Phe	Pro	Ala	Gly	Thr	Arg	Asn	Thr	Gly	Ser	Cys	Thr	Phe	Pro	Leu	Ser				
50					55					60									
Arg	Arg	Arg	Trp	Val	Ile	Thr	Gly	Phe	Thr	Ser	Phe	Pro	Leu	Gln	Met				
65					70					75					80				
Pro	Asp	Gly	Pro	Gly	Met	Thr	Ala	Ala	Ser	Gly	Lys	Leu	Tyr	Gln	Phe				
85					90					95									
Arg	His	Pro	Val	Arg															
100																			

<210> 3613

<211> 149

<212> PRT

<213> Homo sapiens

<400> 3613

Met	Val	Leu	Leu	Leu	Leu	Ser	Leu	Asp	Phe	Trp	Ser	Val	Lys	Asn	Val
				5				10				15			
Thr	Gly	Arg	Leu	Leu	Val	Gly	Leu	Arg	Trp	Trp	Asn	Gln	Ile	Asp	Glu
						20				25				30	
Asp	Gly	Lys	Ser	His	Trp	Ile	Phe	Glu	Ala	Arg	Lys	Val	Ser	Pro	Asn
				35				40				45			
Ser	Ile	Ala	Ala	Thr	Glu	Ala	Glu	Ala	Arg	Ile	Phe	Trp	Leu	Gly	Leu
				50				55				60			
Ile	Ile	Cys	Pro	Met	Ile	Trp	Ile	Val	Phe	Phe	Phe	Ser	Thr	Leu	Phe
65				70				75				80			
Ser	Leu	Lys	Leu	Lys	Trp	Leu	Ala	Leu	Val	Val	Ala	Gly	Ile	Ser	Leu
						85				90				95	
Gln	Ala	Ala	Asn	Leu	Tyr	Gly	Tyr	Ile	Leu	Cys	Lys	Met	Gly	Gly	Asn
100						105				110					
Ser	Asp	Ile	Gly	Lys	Val	Thr	Ala	Ser	Phe	Leu	Ser	Gln	Thr	Val	Phe
115				120				125							
Gln	Thr	Ala	Cys	Pro	Gly	Asp	Phe	Gln	Lys	Pro	Gly	Leu	Glu	Gly	Leu
130				135				140							
Glu Ile His Gln His															

145

<210> 3614

<211> 626

<212> PRT

<213> Homo sapiens

<400> 3614

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Met Pro His Ile Gly Asp Trp Trp Glu Ala Val Ser Glu Thr Val Arg
  1             5             10             15
Ala Thr Phe Leu Thr Leu Leu Gln Asp Ile Pro Ser Phe Ser Pro Ile
      20             25             30
Phe Leu Leu Ser Thr Ser Glu Thr Met Tyr Ser Glu Leu Pro Glu Glu
      35             40             45
Val Lys Cys Ile Phe Arg Ile Gln Tyr Glu Glu Val Leu Tyr Ile Gln
      50             55             60
Arg Pro Ile Glu Glu Asp Arg Arg Lys Phe Phe Gln Glu Leu Ile Leu
      65             70             75             80
Asn Gln Ala Ser Met Ala Pro Pro Arg Arg Lys His Ala Ala Leu Cys
      85             90             95
Ala Met Glu Val Leu Pro Leu Ala Leu Pro Ser Pro Pro Arg Gln Leu
      100            105            110
Ser Glu Ser Glu Lys Ser Arg Met Glu Asp Gln Glu Glu Asn Thr Leu
      115            120            125
Arg Glu Leu Arg Leu Phe Leu Arg Asp Val Thr Lys Arg Leu Ala Thr
      130            135            140
Asp Lys Arg Phe Asn Ile Phe Ser Lys Pro Val Asp Ile Glu Glu Val
      145            150            155            160
Ser Asp Tyr Leu Glu Val Ile Lys Glu Pro Met Asp Leu Ser Thr Val
      165            170            175
Ile Thr Lys Ile Asp Lys His Asn Tyr Leu Thr Ala Lys Asp Phe Leu
      180            185            190
Lys Asp Ile Asp Leu Ile Cys Ser Asn Ala Leu Glu Tyr Asn Pro Asp
      195            200            205
Lys Asp Pro Gly Asp Lys Ile Ile Arg His Arg Ala Cys Thr Leu Lys

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210	215	220	
Asp Thr Ala His Ala Ile Ile Ala Ala Glu Leu Asp Pro Glu Phe Asn			
225	230	235	240
Lys Leu Cys Glu Glu Ile Lys Glu Ala Arg Ile Lys Arg Gly Leu Ser			
	245	250	255
Val Thr Ser Glu Gln Ile Asn Pro His Ser Thr Gly Ala Arg Lys Thr			
	260	265	270
Glu Thr Arg Val Glu Glu Ala Phe Arg His Lys Gln Arg Asn Pro Met			
	275	280	285
Asp Val Trp His Asn Ser Ala Asn Lys Cys Ala Phe Arg Val Arg Arg			
	290	295	300
Lys Ser Arg Arg Arg Ser Gln Trp Gly Lys Gly Ile Ile Lys Lys Arg			
305	310	315	320
Lys Val Asn Asn Leu Lys Lys Asp Glu Glu Asp Thr Lys Phe Ala Asp			
	325	330	335
Tyr Glu Asn His Thr Glu Asp Arg Lys Leu Leu Glu Asn Gly Glu Phe			
	340	345	350
Glu Val Ser Thr Asp Cys His Glu Glu Asn Gly Glu Glu Thr Gly Asp			
	355	360	365
Leu Ser Met Thr Asn Asp Glu Ser Ser Cys Asp Ile Met Asp Leu Asp			
	370	375	380
Gln Gly Gln Arg Leu Asn Asn Gly Ala Gly Thr Lys Glu Asn Phe Ala			
385	390	395	400
Ser Thr Glu Glu Glu Ser Ser Asn Glu Ser Leu Leu Val Asn Ser Ser			
	405	410	415
Ser Ser Leu Asn Pro Glu Gln Thr Ser Arg Lys Glu Thr Phe Leu Lys			
	420	425	430
Gly Asn Cys Leu Asn Gly Glu Ala Ser Thr Asp Ser Phe Glu Gly Ile			
	435	440	445
Pro Val Leu Glu Cys Gln Asn Gly Lys Leu Glu Val Val Ser Phe Cys			
	450	455	460
Asp Ser Gly Asp Lys Cys Ser Ser Glu Gln Lys Ile Leu Leu Glu Asp			
465	470	475	480
Gln Ser Lys Glu Lys Pro Glu Thr Ser Thr Glu Asn His Gly Asp Asp			
	485	490	495
Leu Glu Lys Leu Glu Ala Leu Glu Cys Ser Asn Asn Glu Lys Leu Glu			

500 505 510
 Pro Gly Ser Asp Val Glu Val Lys Asp Ala Glu Leu Asp Lys Glu Gly
 515 520 525
 Ala Ser Lys Val Lys Lys Tyr Arg Lys Leu Ile Leu Glu Gln Ala Lys
 530 535 540
 Thr Thr Ser Leu Glu Leu Val Pro Glu Glu Pro Ser Glu Pro Val Pro
 545 550 555 560
 Pro Leu Ile Val Asp Arg Glu Arg Leu Lys Lys Leu Leu Asp Leu Leu
 565 570 575
 Val Asp Lys Ser Asn Asn Leu Ala Val Asp Gln Leu Glu Arg Leu Tyr
 580 585 590
 Ser Leu Leu Ser Gln Cys Ile Tyr Arg His Arg Lys Asp Tyr Asp Lys
 595 600 605
 Ser Gln Leu Val Glu Glu Met Glu Arg Thr Val His Met Phe Glu Thr
 610 615 620
 Phe Leu
 625

<210> 3615

<211> 131

<212> PRT

<213> Homo sapiens

<400> 3615

Met Asp Met Phe Thr Cys Leu Cys Val Arg Thr Tyr Ser Arg Val Cys
 1 5 10 15
 Asp Thr Ala Ile Phe Thr Arg Leu Cys Asp Thr Ala Ile Phe Thr Arg
 20 25 30
 Leu Cys Asp Thr Asp Ile His Ala Phe Val Cys Arg Thr Tyr Ser His
 35 40 45
 Ile Cys Val Tyr Gly His Ile His Ala Phe Val Ile Gln Thr Tyr Ser
 50 55 60
 Arg Ile Cys Val Tyr Arg His Ser Arg Val Cys Val Ile Arg Ile Tyr
 65 70 75 80
 Ser Arg Ile Cys Asp Thr Asp Ile Phe Thr Arg Leu Cys Asp Thr Ala

	85	90	95
Ile Phe Thr Cys Leu Cys Asp Thr Asp Ile His Ala Phe Val Cys Arg			
100	105	110	
Thr Tyr Ser Arg Val Cys Val Tyr Arg His Ile His Ser Leu Glu Arg			
115	120	125	
Val Glu Ser			
130			

<210> 3616

<211> 929

<212> PRT

<213> Homo sapiens

<400> 3616

Met Thr Ala Ser Ser Val Glu Gln Leu Arg Lys Glu Gly Asn Glu Leu			
1	5	10	15
Phe Lys Cys Gly Asp Tyr Gly Gly Ala Leu Ala Ala Tyr Thr Gln Ala			
20	25	30	
Leu Gly Leu Asp Ala Thr Pro Gln Asp Gln Ala Val Leu His Arg Asn			
35	40	45	
Arg Ala Ala Cys His Leu Lys Leu Glu Asp Tyr Asp Lys Ala Glu Thr			
50	55	60	
Glu Ala Ser Lys Ala Ile Glu Lys Asp Gly Gly Asp Val Lys Ala Leu			
65	70	75	80
Tyr Arg Arg Ser Gln Ala Leu Glu Lys Leu Gly Arg Leu Asp Gln Ala			
85	90	95	
Val Leu Asp Leu Gln Arg Cys Val Ser Leu Glu Pro Lys Asn Lys Val			
100	105	110	
Phe Gln Glu Ala Leu Arg Asn Ile Gly Gly Gln Ile Gln Glu Lys Val			
115	120	125	
Arg Tyr Met Ser Ser Thr Asp Ala Lys Val Glu Gln Met Phe Gln Ile			
130	135	140	
Leu Leu Asp Pro Glu Glu Lys Gly Thr Glu Lys Lys Gln Lys Ala Ser			
145	150	155	160
Gln Asn Leu Val Val Leu Ala Arg Glu Asp Ala Gly Ala Glu Lys Ile			

	165	170	175
Phe Arg Ser Asn Gly Val Gln Leu Leu Gln Arg Leu Leu Asp Met Gly			
	180	185	190
Glu Thr Asp Leu Met Leu Ala Ala Leu Arg Thr Leu Val Gly Ile Cys			
	195	200	205
Ser Glu His Gln Ser Arg Thr Val Ala Thr Leu Ser Ile Leu Gly Thr			
	210	215	220
Arg Arg Val Val Ser Ile Leu Gly Val Glu Ser Gln Ala Val Ser Leu			
225	230	235	240
Ala Ala Cys His Leu Leu Gln Val Met Phe Asp Ala Leu Lys Glu Gly			
	245	250	255
Val Lys Lys Gly Phe Arg Gly Lys Glu Gly Ala Ile Ile Val Asp Pro			
	260	265	270
Ala Arg Glu Leu Lys Val Leu Ile Ser Asn Leu Leu Asp Leu Leu Thr			
	275	280	285
Glu Val Gly Val Ser Gly Gln Gly Arg Asp Asn Ala Leu Thr Leu Leu			
	290	295	300
Ile Lys Ala Val Pro Arg Lys Ser Leu Lys Asp Pro Asn Asn Ser Leu			
305	310	315	320
Thr Leu Trp Val Ile Asp Gln Gly Leu Lys Lys Ile Leu Glu Val Gly			
	325	330	335
Gly Ser Leu Gln Asp Pro Pro Gly Glu Leu Ala Val Thr Ala Asn Ser			
	340	345	350
Arg Met Ser Ala Ser Ile Leu Leu Ser Lys Leu Phe Asp Asp Leu Lys			
	355	360	365
Cys Asp Ala Glu Arg Glu Asn Phe His Arg Leu Cys Glu Asn Tyr Ile			
	370	375	380
Lys Ser Trp Phe Glu Gly Gln Gly Leu Ala Gly Lys Leu Arg Ala Ile			
385	390	395	400
Gln Thr Val Ser Cys Leu Leu Gln Gly Pro Cys Asp Ala Gly Asn Arg			
	405	410	415
Ala Leu Glu Leu Ser Gly Val Met Glu Ser Val Ile Ala Leu Cys Ala			
	420	425	430
Ser Glu Gln Glu Glu Glu Gln Leu Val Ala Val Glu Ala Leu Ile His			
	435	440	445
Ala Ala Gly Lys Ala Lys Arg Ala Ser Phe Ile Thr Ala Asn Gly Val			

450	455	460	
Ser Leu Leu Lys Asp Leu Tyr Lys Cys Ser Glu Lys Asp Ser Ile Arg			
465	470	475	480
Ile Arg Ala Leu Val Gly Leu Cys Lys Leu Gly Ser Ala Gly Gly Thr			
	485	490	495
Asp Phe Ser Met Lys Gln Phe Ala Glu Gly Ser Thr Leu Lys Leu Ala			
	500	505	510
Lys Gln Cys Arg Lys Trp Leu Cys Asn Asp Gln Ile Asp Ala Gly Thr			
	515	520	525
Arg Arg Trp Ala Val Glu Gly Leu Ala Tyr Leu Thr Phe Asp Ala Asp			
	530	535	540
Val Lys Glu Glu Phe Val Glu Asp Ala Ala Ala Leu Lys Ala Leu Phe			
545	550	555	560
Gln Leu Ser Arg Leu Glu Glu Arg Ser Val Leu Phe Ala Val Ala Ser			
	565	570	575
Ala Leu Val Asn Cys Thr Asn Ser Tyr Asp Tyr Glu Glu Pro Asp Pro			
	580	585	590
Lys Met Val Glu Leu Ala Lys Tyr Ala Lys Gln His Val Pro Glu Gln			
	595	600	605
His Pro Lys Asp Lys Pro Ser Phe Val Arg Ala Arg Val Lys Lys Leu			
	610	615	620
Leu Ala Ala Gly Val Val Ser Ala Met Val Cys Met Val Lys Thr Glu			
625	630	635	640
Ser Pro Val Leu Thr Ser Ser Cys Arg Glu Leu Leu Ser Arg Val Phe			
	645	650	655
Leu Ala Leu Val Glu Glu Val Glu Asp Arg Gly Thr Val Val Ala Gln			
	660	665	670
Gly Gly Gly Arg Ala Leu Ile Pro Leu Ala Leu Glu Gly Thr Asp Val			
	675	680	685
Gly Gln Thr Lys Ala Ala Gln Ala Leu Ala Lys Leu Thr Ile Thr Ser			
	690	695	700
Asn Pro Glu Met Thr Phe Pro Gly Glu Arg Ile Tyr Glu Val Val Arg			
705	710	715	720
Pro Leu Val Ser Leu Leu His Leu Asn Cys Ser Gly Leu Gln Asn Phe			
	725	730	735
Glu Ala Leu Met Ala Leu Thr Asn Leu Ala Gly Ile Ser Glu Arg Leu			

<213> Homo sapiens

Met Glu Cys Leu Cys Ala His Pro Pro Ala Gly Leu Gln His Leu Gly
1 5 10 15
Leu Gly His Asn Lys Leu Leu Gly Pro Leu Glu Ser Leu Tyr Val Thr

20	25	30
Ala Asn His Trp Gly Arg Val Arg Leu Gly Leu Gly Asp Ala Val Leu		
35	40	45
Thr Ala Ala Ala Cys Val Phe Leu Leu Phe Ser Glu Leu Arg Ser Ile		
50	55	60
Cys Phe Leu Val Cys Gly Ser Arg Leu Leu Ala Pro Cys Ser Pro Gly		
65	70	75
Phe Leu Thr Pro Arg Arg Ser Cys Ser Pro Ser Arg Pro Asn Leu Val		
85	90	95
Ser Leu Asp Leu Gly Phe Asn Asp Leu Thr Asp Leu Gln Ser Met Val		
100	105	110
Thr Ser Leu Arg Thr Leu Arg His Leu Arg Leu Leu Val Leu Lys Gly		
115	120	125
Asn Pro Leu Ala Leu Val Pro Tyr Tyr Arg Gly Leu Thr Ile Asp Ser		
130	135	140
Leu Ala Gln Leu Cys Val Leu Asp Asp Ile Thr Val Ser Pro Asn Glu		
145	150	155
Lys His Leu Phe Arg Gly Leu Ser Leu Asn Gly Asp Leu Leu Ala Gln		
165	170	175
Glu Ala Gln Phe Val Val Thr Ile Gly Asn Ile Arg Gly Val Leu Asp		
180	185	190
Thr Ser Val Leu Asp Pro Glu Pro Arg Pro Glu Gly Pro Phe Ile Thr		
195	200	205
Tyr Asn Tyr Tyr Val Thr Tyr Asp Phe Val Lys Asp Glu Glu Gly Glu		
210	215	220
Met Asn Glu Ser Ala Gly Val Leu Ala Glu Ile Val Lys Pro Ser Pro		
225	230	235
Ser Leu Glu Leu Leu Val Glu Glu Ser Pro Glu Glu Val Val Glu Asp		
245	250	255
Val Ile Glu Asp Ile Val Glu Glu Val Thr Glu Glu Val Glu Gly Ser		
260	265	270
Leu Glu Ser Glu Val Glu Glu Ser Gly Glu Ser Glu Leu Ser Val Ile		
275	280	285
Ser Gly Pro Ser Thr Ile Leu Gln Met Pro Arg Ala Ser Ala Glu Glu		
290	295	300
Leu Ala Lys Leu Arg Leu Arg Ile Asp Pro Arg Leu Cys Pro Ser Pro		

305 310 315 320
 Gly Thr Val Leu Phe Ser Thr Ala His Lys Pro Trp Ala Glu Val Ile
 325 330 335
 Pro Cys Ser Tyr Glu Met Gln His Ser Leu Arg Asp Leu Val Pro Leu
 340 345 350
 Lys Ala Phe Leu Leu Ala Gly Thr Thr Val Thr Ile Val Glu Glu Lys
 355 360 365
 Ile Leu Ser Trp Pro Val Val Leu Pro Ala Val Asp Ser Pro Leu Ser
 370 375 380
 Ala Lys Lys Gly Lys Gly Glu Lys Asp Lys Lys Gly Lys Glu Lys Asp
 385 390 395 400
 Arg Thr Gly Lys Gly Glu Lys Glu Pro Ala Lys Glu Trp Lys Val Leu
 405 410 415
 Lys Lys Lys Lys Glu Pro Pro Lys Glu Leu Arg Gln Asn Pro Pro Ile
 420 425 430
 Leu Gln Val Leu Gly Arg Gly Leu Val Ile Leu Glu Pro Leu Leu Ala
 435 440 445
 Gly Glu Pro Leu Val Ser Thr Val Cys Asn Phe Gly Val Val Arg Thr
 450 455 460
 Leu Thr Ser Asp Arg Leu Thr Leu Ala Arg Asp Ser Lys Lys Ile Lys
 465 470 475 480
 Lys Val Ala Lys Lys Glu Lys Pro Lys Ala Val Ile Pro Ile Tyr Glu
 485 490 495
 Gly Asp Tyr His Pro Glu Pro Leu Thr Val Glu Val Gln Ile Gln Leu
 500 505 510
 Asn Gln Cys Arg Ser Ala Glu Glu Ala Leu Arg Met Phe Ala Val
 515 520 525

<210> 3618

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3618

Met Arg Lys Ala Tyr Ser Pro Leu Gln Val Leu Arg Gly Cys Leu Leu

1 5 10 15
 Leu Pro Ser Leu Leu His Ala Leu Ser Leu Gln Glu Gln Pro Met Val
 20 25 30
 Trp Pro Leu Thr Arg Gly Pro Ser Ser Ala Ser Asp Ala Leu Ser Ser
 35 40 45
 Gly Gly Pro Tyr His Pro Ser Glu Cys Cys Phe Thr Tyr Thr Thr Tyr
 50 55 60
 Lys Ile Pro Arg Gln Arg Ile Met Asp Tyr Tyr Glu Thr Asn Ser Gln
 65 70 75 80
 Cys Ser Lys Pro Gly Ile Val Phe Ile Thr Lys Arg Gly His Ser Val
 85 90 95
 Cys Thr Asn Pro Ser Asp Lys Trp Val Gln Asp Tyr Ile Lys Asp Met
 100 105 110
 Lys Glu Asn
 115

<210> 3619

<211> 528

<212> PRT

<213> Homo sapiens

<400> 3619

Met Ala Ala Tyr Gln Gln Glu Glu Gln Met Gln Leu Pro Arg Ala Asp
 1 5 10 15
 Ala Ile Arg Ser Arg Leu Ile Asp Thr Phe Ser Leu Ile Glu His Leu
 20 25 30
 Gln Gly Leu Ser Gln Ala Val Pro Arg His Thr Ile Arg Glu Leu Leu
 35 40 45
 Asp Pro Ser Arg Gln Lys Lys Leu Ile Leu Gly Asp Gln His Gln Leu
 50 55 60
 Val Arg Phe Ser Ile Lys Pro Gln Arg Ile Glu Gln Ile Ser His Ala
 65 70 75 80
 Gln Arg Leu Leu Ser Arg Leu His Val Arg Cys Ser Gln Arg Pro Pro
 85 90 95
 Leu Ser Leu Trp Ala Gly Trp Val Leu Glu Cys Pro Leu Phe Lys Asn

100	105	110
Phe Ile Ile Phe Leu Val Phe Leu Asn Thr Ile Ile Leu Met Val Glu		
115	120	125
Ile Glu Leu Leu Glu Ser Thr Asn Thr Lys Leu Trp Pro Leu Lys Leu		
130	135	140
Thr Leu Glu Val Ala Ala Trp Phe Ile Leu Leu Ile Phe Ile Leu Glu		
145	150	155
Ile Leu Leu Lys Trp Leu Ser Asn Phe Ser Val Phe Trp Lys Ser Ala		
165	170	175
Trp Asn Val Phe Asp Phe Val Val Thr Met Leu Ser Leu Leu Pro Glu		
180	185	190
Val Val Val Leu Val Gly Val Thr Gly Gln Ser Val Trp Leu Gln Leu		
195	200	205
Leu Arg Ile Cys Arg Val Leu Arg Ser Leu Lys Leu Leu Ala Gln Phe		
210	215	220
Arg Gln Ile Gln Ile Ile Ile Leu Val Leu Val Arg Ala Leu Lys Ser		
225	230	235
Met Thr Phe Leu Leu Met Leu Leu Leu Ile Phe Phe Tyr Ile Phe Ala		
245	250	255
Val Thr Gly Val Tyr Val Phe Ser Glu Tyr Thr Arg Ser Pro Arg Gln		
260	265	270
Asp Leu Glu Tyr His Val Ser Phe Ser Asp Leu Pro Asn Ser Leu Val		
275	280	285
Thr Val Phe Ile Leu Phe Thr Leu Asp His Trp Tyr Ala Leu Leu Gln		
290	295	300
Asp Val Trp Lys Val Pro Glu Val Ser Arg Ile Phe Ser Ser Ile Tyr		
305	310	315
Phe Ile Leu Trp Leu Leu Leu Gly Ser Ile Ile Phe Arg Ser Ile Ile		
325	330	335
Val Ala Met Met Val Thr Asn Phe Gln Asn Ile Arg Lys Glu Leu Asn		
340	345	350
Glu Glu Met Ala Arg Arg Glu Val Gln Leu Lys Ala Asp Met Phe Lys		
355	360	365
Arg Gln Ile Ile Gln Arg Arg Lys Asn Met Ser His Glu Ala Leu Thr		
370	375	380
Ser Ser His Ser Lys Ile Glu Asp Arg Gly Ala Ser Gln Gln Arg Glu		

385 390 395 400
 Ser Leu Asp Leu Ser Glu Val Ser Glu Val Glu Ser Asn Tyr Gly Ala
 405 410 415
 Thr Glu Glu Asp Leu Ile Thr Ser Ala Ser Lys Thr Glu Glu Thr Leu
 420 425 430
 Ser Lys Lys Arg Glu Tyr Gln Ser Ser Pro Cys Val Ser Ser Thr Ser
 435 440 445
 Ser Ser Tyr Ser Ser Ser Ser Glu Ser Arg Phe Ser Glu Ser Ile Gly
 450 455 460
 Arg Leu Asp Trp Glu Thr Leu Val His Glu Asn Leu Pro Gly Leu Met
 465 470 475 480
 Glu Met Asp Gln Asp Asp Arg Val Trp Pro Arg Asp Ser Leu Phe Arg
 485 490 495
 Tyr Phe Glu Leu Leu Glu Lys Leu Gln Tyr Asn Leu Glu Glu Arg Lys
 500 505 510
 Lys Leu Gln Glu Phe Ala Val Gln Ala Leu Met Asn Leu Glu Asp Lys
 515 520 525

<210> 3620

<211> 279

<212> PRT

<213> Homo sapiens

<400> 3620

Met Phe Arg Leu Trp Leu Leu Leu Ala Gly Leu Cys Gly Leu Leu Ala
 1 5 10 15
 Ser Arg Pro Gly Phe Gln Asn Ser Leu Leu Gln Ile Val Ile Pro Glu
 20 25 30
 Lys Ile Gln Thr Asn Thr Asn Asp Ser Ser Glu Ile Glu Tyr Glu Gln
 35 40 45
 Ile Ser Tyr Ile Ile Pro Ile Asp Glu Lys Leu Tyr Thr Val His Leu
 50 55 60
 Lys Gln Arg Tyr Phe Leu Ala Asp Asn Phe Met Ile Tyr Leu Tyr Asn
 65 70 75 80
 Gln Gly Ser Met Asn Thr Tyr Ser Ser Asp Ile Gln Thr Gln Cys Tyr

	85	90	95
Tyr Gln Gly Asn Ile Glu Gly Tyr Pro Asp Ser Met Val Thr Leu Ser			
	100	105	110
Thr Cys Ser Gly Leu Arg Gly Ile Leu Gln Phe Glu Asn Val Ser Tyr			
	115	120	125
Gly Ile Glu Pro Leu Glu Ser Ala Val Glu Phe Gln His Val Leu Tyr			
	130	135	140
Lys Leu Lys Asn Glu Asp Asn Asp Ile Ala Ile Phe Ile Asp Arg Ser			
145	150	155	160
Leu Lys Glu Gln Pro Met Asp Asp Asn Ile Phe Ile Ser Glu Lys Ser			
	165	170	175
Glu Pro Ala Val Pro Asp Leu Phe Pro Leu Tyr Leu Glu Met His Ile			
	180	185	190
Val Val Asp Lys Thr Leu Tyr Asp Tyr Trp Gly Ser Asp Ser Met Ile			
	195	200	205
Val Thr Asn Lys Val Ile Glu Ile Val Gly Leu Ala Asn Ser Met Phe			
	210	215	220
Thr Gln Phe Lys Val Thr Ile Val Leu Ser Ser Leu Glu Leu Trp Ser			
225	230	235	240
Asp Glu Asn Lys Ile Ser Thr Val Gly Glu Ala Asp Trp Arg Glu Met			
	245	250	255
Lys Ser Val Ile Val Val Leu Arg Leu Asn Val Asp Leu Gln Ala Val			
	260	265	270
Val Ile Phe Glu Leu Val Tyr			
275			

<210> 3621

<211> 161

<212> PRT

<213> Homo sapiens

<400> 3621

Met Ile Ser Val Val Leu Cys Trp Glu Glu Glu Thr Ala Gly Asn His
1 5 10 15
Arg Lys Leu Val Gln Gly Ala Pro Met Lys Lys Ser Gln Ala Arg Leu

	20		25		30										
Leu	Arg	Arg	Gly	Pro	Gly	Asn	Pro	Thr	Pro	Gly	Phe	Pro	Leu	Gly	
	35		40		45										
Val	Gly	Gln	Ser	Gln	Leu	Gln	Asp	Pro	Ala	Thr	Ala	Ala	Arg	Phe	Pro
	50		55		60										
Glu	Cys	Trp	Arg	Ser	Pro	Leu	Arg	Gly	Arg	Gly	Arg	Ala	Leu	Ser	Ser
65			70		75									80	
Arg	Thr	Arg	Ala	Pro	Pro	Pro	Arg	Pro	Gly	Pro	Leu	Thr	Val	Glu	Ala
	85		90		95										
Phe	His	Leu	Trp	Leu	Leu	Ala	Leu	Gly	Leu	Leu	Leu	Gln	Pro	Leu	Gly
	100		105		110										
Phe	Ala	Ala	Leu	Leu	Ala	Val	Glu	His	Glu	Ala	Gln	His	Gly	Asn	Asp
	115		120		125										
Val	Gly	His	Ser	Gly	Thr	His	Arg	Gln	Pro	Asn	Gly	Leu	Asp	His	Leu
	130		135		140										
Val	Gly	Gly	Arg	Ala	Ala	Arg	Ala	Leu	Arg	Leu	Leu	Arg	His	Arg	Leu
145			150		155									160	
Val															

<210> 3622

<211> 514

<212> PRT

<213> Homo sapiens

<400> 3622

Met	Gly	Asp	Trp	Asn	Leu	Leu	Gly	Asp	Thr	Leu	Glu	Glu	Val	His	Ile
1			5		10		15								
His	Ser	Thr	Met	Ile	Gly	Lys	Ile	Trp	Leu	Thr	Ile	Leu	Phe	Ile	Phe
	20		25		30										
Arg	Met	Leu	Val	Leu	Gly	Val	Ala	Ala	Glu	Asp	Val	Trp	Asn	Asp	Glu
	35		40		45										
Gln	Ser	Gly	Phe	Ile	Cys	Asn	Thr	Glu	Gln	Pro	Gly	Cys	Arg	Asn	Val
	50		55		60										
Cys	Tyr	Asp	Gln	Ala	Phe	Pro	Ile	Ser	Leu	Ile	Arg	Tyr	Trp	Val	Leu

65		70		75		80
Gln Val Ile Phe Val Ser Ser Pro Ser Leu Val Tyr Met Gly His Ala						
	85		90		95	
Leu Tyr Arg Leu Arg Val Leu Glu Glu Glu Arg Gln Arg Met Lys Ala						
	100		105		110	
Gln Leu Arg Val Glu Leu Glu Glu Val Glu Phe Glu Met Pro Arg Asp						
	115		120		125	
Arg Arg Arg Leu Glu Gln Glu Leu Cys Gln Leu Glu Lys Arg Lys Leu						
	130		135		140	
Asn Lys Ala Pro Leu Arg Gly Thr Leu Leu Cys Thr Tyr Val Ile His						
145		150		155		160
Ile Phe Thr Arg Ser Val Val Glu Val Gly Phe Met Ile Gly Gln Tyr						
	165		170		175	
Leu Leu Tyr Gly Phe His Leu Glu Pro Leu Phe Lys Cys His Gly His						
	180		185		190	
Pro Cys Pro Asn Ile Ile Asp Cys Phe Val Ser Arg Pro Thr Glu Lys						
	195		200		205	
Thr Ile Phe Leu Leu Phe Met Gln Ser Ile Ala Thr Ile Ser Leu Phe						
	210		215		220	
Leu Asn Ile Leu Glu Ile Phe His Leu Gly Phe Lys Lys Ile Lys Arg						
225		230		235		240
Gly Leu Trp Gly Lys Tyr Lys Leu Lys Lys Glu His Asn Glu Phe His						
	245		250		255	
Ala Asn Lys Ala Lys Gln Asn Val Ala Lys Tyr Gln Ser Thr Ser Ala						
	260		265		270	
Asn Ser Leu Lys Arg Leu Pro Ser Ala Pro Asp Tyr Asn Leu Leu Val						
	275		280		285	
Glu Lys Gln Thr His Thr Ala Val Tyr Pro Ser Leu Asn Ser Ser Ser						
	290		295		300	
Val Phe Gln Pro Asn Pro Asp Asn His Ser Val Asn Asp Glu Lys Cys						
305		310		315		320
Ile Leu Asp Glu Gln Glu Thr Val Leu Ser Asn Glu Ile Ser Thr Leu						
	325		330		335	
Ser Thr Ser Cys Ser His Phe Gln His Ile Ser Ser Asn Asn Asn Lys						
	340		345		350	
Asp Thr His Lys Ile Phe Gly Lys Glu Leu Asn Gly Asn Gln Leu Met						

355 360 365
 Glu Lys Arg Glu Thr Glu Gly Lys Asp Ser Lys Arg Asn Tyr Tyr Ser
 370 375 380
 Arg Gly His Arg Ser Ile Pro Gly Val Ala Ile Asp Gly Glu Asn Asn
 385 390 395 400
 Met Arg Gln Ser Pro Gln Thr Val Phe Ser Leu Pro Ala Asn Cys Asp
 405 410 415
 Trp Lys Pro Arg Trp Leu Arg Ala Thr Trp Gly Ser Ser Thr Glu His
 420 425 430
 Glu Asn Arg Gly Ser Pro Pro Lys Val Pro Gly Ser Lys Ala Thr Ala
 435 440 445
 Ser Ser Leu Leu Leu Ile Leu Gln Arg Pro Thr Ser Ser Gln Pro Arg
 450 455 460
 Leu Lys Glu Thr Pro Lys Ile Lys Ala Glu Ala Lys Ile Tyr Asp Ser
 465 470 475 480
 Lys His Pro Pro Gln Leu Leu Gln Ser Thr Val Ser Thr Phe Ser Gly
 485 490 495
 Arg Glu Pro Arg Ser Pro Ala Pro Met Gly His His Ser Phe Arg Gly
 500 505 510
 Pro Arg

<210> 3623

<211> 345

<212> PRT

<213> Homo sapiens

<400> 3623

Met Ser Glu Asn Glu Leu Asp Thr Thr Leu His Leu Lys Cys Lys Leu
 1 5 10 15
 Gly Met Lys Ser Ile Leu Pro Ile Phe Arg Cys Leu Asn Ser Leu Glu
 20 25 30
 Arg Asn Ile Glu Lys Cys Arg Ile Phe Thr Arg Ser Asp Lys Cys Lys
 35 40 45
 Val Val Ile Gln Phe Phe Tyr Arg His Gly Ile Lys Arg Thr His Asn

50	55	60	
Ile Cys Phe Gln Glu Ser Gln Pro Leu Gln Val Ile Phe Asp Lys Asn			
65	70	75	80
Val Cys Thr Asn Thr Leu Met Ile Gln Pro Arg Leu Leu Ala Asp Ala			
	85	90	95
Ile Val Leu Phe Thr Ser Ser Gln Glu Glu Val Thr Leu Ala Val Thr			
	100	105	110
Pro Leu Asn Phe Cys Leu Lys Ser Ser Asn Glu Glu Ser Met Asp Leu			
	115	120	125
Ser Asn Ala Val His Ser Glu Met Phe Val Gly Ser Asp Glu Phe Asp			
	130	135	140
Phe Phe Gln Ile Gly Met Asp Thr Glu Ile Thr Phe Cys Phe Lys Glu			
145	150	155	160
Leu Lys Gly Ile Leu Thr Phe Ser Glu Ala Thr His Ala Pro Ile Ser			
	165	170	175
Ile Tyr Phe Asp Phe Pro Gly Lys Pro Leu Ala Leu Ser Ile Asp Asp			
	180	185	190
Met Leu Val Glu Ala Asn Phe Ile Leu Ala Thr Leu Ala Asp Glu Gln			
	195	200	205
Ser Arg Ala Ser Ser Pro Gln Ser Leu Cys Leu Ser Gln Lys Arg Lys			
	210	215	220
Arg Ser Asp Leu Ile Glu Lys Lys Ala Gly Lys Asn Val Thr Gly Gln			
225	230	235	240
Ala Leu Glu Cys Ile Ser Lys Lys Ala Ala Pro Arg Arg Leu Tyr Pro			
	245	250	255
Lys Glu Thr Leu Thr Asn Ile Ser Ala Leu Glu Asn Cys Gly Ser Pro			
	260	265	270
Ala Met Lys Arg Val Asp Gly Asp Val Ser Glu Val Ser Glu Ser Ser			
	275	280	285
Val Ser Asn Thr Glu Glu Val Pro Gly Ser Leu Cys Leu Arg Lys Phe			
	290	295	300
Ser Cys Met Phe Phe Gly Ala Val Ser Ser Asp Gln Gln Glu His Phe			
305	310	315	320
Asn His Pro Phe Asp Ser Leu Ala Arg Ala Ser Asp Ser Glu Glu Asp			
	325	330	335
Met Asn Asn Gly Ser Phe Ser Ile Phe			

340

345

<210> 3624

<211> 718

<212> PRT

<213> Homo sapiens

<400> 3624

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Met Val Gly Lys Ser Gln Gln Thr Asp Val Ile Glu Lys Lys Lys His
  1             5             10             15
Met Ala Ile Pro Lys Ser Ser Ser Pro Lys Ala Thr His Arg Ile Gly

                20                25                30
Asn Thr Ser Gly Ser Lys Gly Ser Tyr Ser Ala Lys Ala Tyr Glu Ser
   35             40             45
Ile Arg Val Ser Ser Glu Leu Gln Gln Thr Trp Thr Lys Arg Lys His
   50             55             60
Gly Gln Glu Met Thr Ser Lys Ser Leu Gln Thr Asp Thr Ile Val Glu
   65             70             75             80
Glu Lys Lys Glu Val Lys Leu Val Glu Glu Thr Val Val Pro Glu Glu
                85                90                95
Lys Ser Ala Asp Val Arg Glu Ala Ala Ile Glu Leu Pro Glu Ser Val
                100               105               110
Gln Asp Val Glu Ile Pro Pro Asn Ile Pro Ser Val Gln Leu Lys Met
                115               120               125
Asp Arg Ser Gln Gln Thr Ser Arg Thr Gly Tyr Trp Thr Met Met Asn
                130               135               140
Ile Pro Pro Val Glu Lys Val Asp Lys Glu Gln Gln Thr Tyr Phe Ser
   145             150             155             160
Glu Ser Glu Ile Val Val Ile Ser Arg Pro Asp Ser Ser Ser Thr Lys
                165               170               175
Ser Lys Glu Asp Ala Leu Lys His Lys Ser Ser Gly Lys Ile Phe Ala
                180               185               190
Ser Glu His Pro Glu Phe Gln Pro Ala Thr Asn Ser Asn Glu Glu Ile
                195               200               205

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Gly Gln Lys Asn Ile Ser Arg Thr Ser Phe Thr Gln Glu Thr Lys Lys			
210	215	220	
Gly Pro Pro Val Leu Leu Glu Asp Glu Leu Arg Glu Glu Val Thr Val			
225	230	235	240
Pro Val Val Gln Glu Gly Ser Ala Val Lys Lys Val Ala Ser Ala Glu			
	245	250	255
Ile Glu Pro Pro Ser Thr Glu Lys Phe Pro Ala Lys Ile Gln Pro Pro			
	260	265	270
Leu Val Glu Glu Ala Thr Ala Lys Ala Glu Pro Arg Pro Ala Glu Glu			
	275	280	285
Thr His Val Gln Val Gln Pro Ser Thr Glu Glu Thr Pro Asp Ala Glu			
	290	295	300
Ala Ala Thr Ala Val Ala Glu Asn Ser Val Lys Val Gln Pro Pro Pro			
305	310	315	320
Ala Glu Glu Ala Pro Leu Val Glu Phe Pro Ala Glu Ile Gln Pro Pro			
	325	330	335
Ser Ala Glu Glu Ser Pro Ser Val Glu Leu Leu Ala Glu Ile Leu Pro			
	340	345	350
Pro Ser Ala Glu Glu Ser Pro Ser Glu Glu Pro Pro Ala Glu Ile Leu			
	355	360	365
Pro Pro Pro Ala Glu Lys Ser Pro Ser Val Glu Leu Leu Gly Glu Ile			
	370	375	380
Arg Ser Pro Ser Ala Gln Lys Ala Pro Ile Glu Val Gln Pro Leu Pro			
385	390	395	400
Ala Glu Gly Ala Leu Glu Glu Ala Pro Ala Lys Val Glu Pro Pro Thr			
	405	410	415
Val Glu Glu Thr Leu Ala Glu Val Gln Pro Leu Leu Pro Glu Glu Ala			
	420	425	430
Pro Arg Glu Glu Ala Arg Glu Leu Gln Leu Ser Thr Ala Met Glu Thr			
	435	440	445
Pro Ala Glu Glu Ala Pro Thr Glu Phe Gln Ser Pro Leu Pro Lys Glu			
	450	455	460
Thr Thr Ala Glu Glu Ala Ser Ala Glu Ile Gln Leu Leu Ala Ala Thr			
465	470	475	480
Glu Ala Ser Ala Glu Glu Ala Pro Ala Glu Val Gln Pro Pro Pro Ala			
	485	490	495

Glu Glu Ala Pro Ala Glu Val Gln Pro Pro Pro Ala Glu Glu Ala Pro
 500 505 510
 Ala Glu Val Gln Pro Pro Pro Ala Glu Glu Ala Pro Ala Glu Val Gln
 515 520 525
 Pro Pro Pro Ala Glu Glu Ala Pro Ala Glu Val Gln Pro Pro Pro Ala
 530 535 540
 Glu Glu Ala Pro Ala Glu Val Gln Pro Pro Pro Ala Glu Glu Ala Pro
 545 550 555 560
 Ser Glu Val Gln Pro Pro Pro Ala Glu Glu Ala Pro Ala Glu Val Gln
 565 570 575
 Ser Leu Pro Ala Glu Glu Thr Pro Ile Glu Glu Thr Leu Ala Ala Val
 580 585 590
 His Ser Pro Pro Ala Asp Asp Val Pro Ala Glu Glu Ala Ser Val Asp
 595 600 605
 Lys His Ser Pro Pro Ala Asp Leu Leu Leu Thr Glu Glu Phe Pro Ile
 610 615 620
 Gly Glu Ala Ser Ala Glu Val Ser Pro Pro Pro Ser Glu Gln Thr Pro
 625 630 635 640
 Glu Asp Glu Ala Leu Val Glu Asn Val Ser Thr Glu Phe Gln Ser Pro
 645 650 655
 Gln Val Ala Gly Ile Pro Ala Val Lys Leu Gly Ser Val Val Leu Glu
 660 665 670
 Gly Glu Ala Lys Phe Glu Glu Val Ser Lys Ile Asn Ser Val Leu Lys
 675 680 685
 Asp Leu Ser Asn Thr Asn Asp Gly Gln Ala Pro Thr Leu Glu Ile Glu
 690 695 700
 Ser Val Phe His Ile Glu Leu Lys Gln Arg Pro Pro Glu Leu
 705 710 715

<210> 3625

<211> 219

<212> PRT

<213> Homo sapiens

<400> 3625

Met Gly Val Val Pro Val Ser Tyr Phe Ile Arg Asn Met Glu Glu Ser
 1 5 10 15
 Tyr Val Asn Leu Asn His His Gly Leu Gly Pro Arg Gly Thr Lys Ala
 20 25 30
 Ile Ala Ile Ala Leu Val Ser Asn Met Ala Val Thr Lys Leu Glu Leu
 35 40 45
 Glu Asp Asn Cys Ile Met Glu Glu Gly Val Leu Ser Leu Val Glu Met
 50 55 60
 Leu Gln Glu Asn Tyr Tyr Leu Gln Glu Met Asn Ile Ser Asn Asn His
 65 70 75 80
 Leu Gly Leu Glu Gly Ala Arg Ile Ile Ser Asp Phe Phe Glu Arg Asn
 85 90 95
 Ser Ser Ser Ile Trp Ser Leu Glu Leu Ser Gly Asn Asp Phe Lys Glu
 100 105 110
 Asp Ser Ala Ala Leu Leu Cys Gln Ala Leu Ser Thr Asn Tyr Gln Ile
 115 120 125
 Lys Lys Leu Asp Leu Ser His Asn Gln Phe Ser Asp Val Gly Gly Glu
 130 135 140
 His Leu Gly Gln Met Leu Ala Ile Asn Val Gly Leu Thr Ser Leu Asp
 145 150 155 160
 Leu Ser Trp Asn Asn Phe His Thr Arg Gly Ala Val Ala Leu Cys Asn
 165 170 175
 Gly Leu Arg Gly Lys Ser Ser Asp Ser Thr Ala Ala Trp Ser Thr Trp
 180 185 190
 Ile Ser Val Ala Met Thr Ser Ala Met Lys Gly Pro Pro Lys Ser Ala
 195 200 205
 Lys Asp Trp Asn Pro Met Lys Ala Ser Glu Phe
 210 215

<210> 3626

<211> 563

<212> PRT

<213> Homo sapiens

<400> 3626

Met Ile Lys Arg Lys Ile Trp Cys Asn Leu Cys Ile Asp Leu Val Ala
 1 5 10 15
 Phe Thr Ser Glu Ile Phe Lys Gly Ala Val Phe Gln Ser Leu Asp Gly
 20 25 30
 Ile Val Val Ser Ala Asn Cys Lys Leu Arg Lys Ile Phe Thr Leu Lys
 35 40 45
 Ser Lys Pro Gln Asp Thr Ala Asp Lys Asp Ala Val Tyr Gly Val Pro
 50 55 60
 Phe Ser Thr Asp Glu Pro Thr Asp Ile Ile Pro Arg Ser Cys Gln Leu
 65 70 75 80
 Met Thr Asp Val Pro His Val Thr Gln Leu Leu Asn Met Thr Lys Leu
 85 90 95
 Arg Gln Thr Glu Ile Lys Phe Gly Gly His Pro Leu Arg Ser Ala Glu
 100 105 110
 Ser Asp Gln Phe Ile Asn Arg Gly Thr Ser Ile Thr Arg Asn Ser Lys
 115 120 125
 Asn Gln Asp Val Cys His Ile Ala Phe Gly Ser Lys Val Leu Gly Pro
 130 135 140
 Pro Pro Leu Ser Gly Arg Arg Asn Asn Met Lys Ile Ser Ser Glu Thr
 145 150 155 160
 Val Arg Ser Val Gly Ser Lys Asn Asn Arg Ser Cys Gln Pro Ser Thr
 165 170 175
 Val Glu Lys Cys Val Asn Gly Thr Glu Met Ser Ala Leu Leu Ile Pro
 180 185 190
 Glu Ser Glu Glu Gln Gly Asn Lys Glu Asn Ile His Gln Ile Lys Gln
 195 200 205
 Thr Val Pro Ile His Ala Ala Asn Leu His Ile Met His Pro His Pro
 210 215 220
 Pro Gln Glu Pro Ser Ala Asp Lys Asn Asn Asn Arg Arg Arg Leu Arg
 225 230 235 240
 Leu Lys Ser Thr Ser Arg Glu Arg Thr Glu Thr Pro Ser Gly Ser Ser
 245 250 255
 Ser Gly Asn Asn Arg Ile Glu Asp Lys Ala Ser Thr Ile Leu Thr Thr
 260 265 270
 Val Ser Gln Gln Gly Ala Glu Leu Leu Asn Ser Gly Thr Leu Gly Pro
 275 280 285

Gln Ser Pro Asp Gln Ser Asp Glu Trp Ile Phe Pro Glu Asn Ala Asp
 290 295 300
 His Ile Ser Tyr Leu Ala Ser Ser Arg Gln Ser Leu Leu Leu Gly Asp
 305 310 315 320
 Asp Ser Cys Asn Pro Ser His Leu Trp Leu Glu Ala Ser Lys Glu Ser
 325 330 335
 Glu His Asp Gln Gln Ala Glu Glu Ser Gln Ser Val Pro Lys Asp Ile
 340 345 350
 Phe Thr Phe Ser Ser Arg Pro Arg Ser Ala Pro His Gly Lys Thr Gln
 355 360 365
 Thr Met Ser Pro Glu Glu Leu Ser Phe Ile Leu Asp Leu Lys Glu Asp
 370 375 380
 Asn Ser Val Thr Ser Arg Asp Thr Gln Ser Glu Asp Asp Phe Tyr Gly
 385 390 395 400
 Gly Asp Ser Ser Glu Glu Glu Tyr Asp Trp Arg Asn Tyr Gln Pro Ser
 405 410 415
 Gln Met Ser Glu Ser Glu Leu Gln Met Leu Ala Ser Leu Arg Trp Gln
 420 425 430
 Gln Asn Glu Glu Leu Glu Asp Ala Gly Thr Ser His Gly Leu Ser Ala
 435 440 445
 Ser Gln Val Asp Asn Cys Asn Val Ser Ile Ser Thr Ser Ser Asp Asp
 450 455 460
 Thr Thr Thr Trp Asn Ser Cys Leu Pro Pro Pro Val Asn Gln Gly Arg
 465 470 475 480
 His Tyr Gln Lys Glu Met Asn Pro Pro Ser Pro Ser Asn Pro Arg Asp
 485 490 495
 Trp Leu Asn Met Leu Ser Pro Pro Ile Val Pro Pro Ser Gln Gln Pro
 500 505 510
 Ala Glu Gln Arg Pro Asp Ser Cys Glu Ser Leu Ser Val Gln Gly Glu
 515 520 525
 Glu Asp Leu Ser Val Glu Glu Asp Glu Glu Val Leu Thr Leu Leu Tyr
 530 535 540
 Asp Pro Cys Leu Asn Cys Tyr Phe Asp Pro Gln Thr Gly Lys Tyr Tyr
 545 550 555 560
 Glu Leu Val

<210> 3627

<211> 512

<212> PRT

<213> Homo sapiens

<400> 3627

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Met Asn Val Arg Ile Asp Pro Ser Ser Leu Ser Phe Asn Met Trp Lys
  1             5             10             15
Glu Ile Pro Ile Pro Phe Tyr Leu Ser Val Tyr Phe Phe Asp Val Met
      20             25             30
Asn Pro Ser Glu Ile Leu Lys Gly Glu Lys Pro Gln Val Arg Glu Arg
      35             40             45
Gly Pro Tyr Val Tyr Arg Glu Phe Arg His Lys Ser Asn Ile Thr Phe
      50             55             60
Asn Asn Asn Asp Thr Val Ser Phe Leu Glu Tyr Arg Thr Phe Gln Phe
      65             70             75             80
Gln Pro Ser Lys Ser His Gly Ser Glu Ser Asp Tyr Ile Val Met Pro
      85             90             95
Asn Ile Leu Val Leu Gly Ala Ala Val Met Met Glu Asn Lys Pro Met

      100             105             110
Thr Leu Lys Leu Ile Met Thr Leu Ala Phe Thr Thr Leu Gly Glu Arg
      115             120             125
Ala Phe Met Asn Arg Thr Val Gly Glu Ile Met Trp Gly Tyr Lys Asp
      130             135             140
Pro Leu Val Asn Leu Ile Asn Lys Tyr Phe Pro Gly Met Phe Pro Phe
      145             150             155             160
Lys Asp Lys Phe Gly Leu Phe Ala Glu Leu Asn Asn Ser Asp Ser Gly
      165             170             175
Leu Phe Thr Val Phe Thr Gly Val Gln Asn Ile Ser Arg Ile His Leu
      180             185             190
Val Asp Lys Trp Asn Gly Leu Ser Lys Val Asp Phe Trp His Ser Asp
      195             200             205

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Gln Cys Asn Met Ile Asn Gly Thr Ser Gly Gln Met Trp Pro Pro Phe			
210	215	220	
Met Thr Pro Glu Ser Ser Leu Glu Phe Tyr Ser Pro Glu Ala Cys Arg			
225	230	235	240
Ser Met Lys Leu Met Tyr Lys Glu Ser Gly Val Phe Glu Gly Ile Pro			
245	250	255	
Thr Tyr Arg Phe Val Ala Pro Lys Thr Leu Phe Ala Asn Gly Ser Ile			
260	265	270	
Tyr Pro Pro Asn Glu Gly Phe Cys Pro Cys Leu Glu Ser Gly Ile Gln			
275	280	285	
Asn Val Ser Thr Cys Arg Phe Ser Ala Pro Leu Phe Leu Ser His Pro			
290	295	300	
His Phe Leu Asn Ala Asp Pro Val Leu Ala Glu Ala Val Thr Gly Leu			
305	310	315	320
His Pro Asn Gln Glu Ala His Ser Leu Phe Leu Asp Ile His Pro Val			
325	330	335	
Thr Gly Ile Pro Met Asn Cys Ser Val Lys Leu Gln Leu Ser Leu Tyr			
340	345	350	
Met Lys Ser Val Ala Gly Ile Gly Gln Thr Gly Lys Ile Glu Pro Val			
355	360	365	
Val Leu Pro Leu Leu Trp Phe Ala Glu Ser Gly Ala Met Glu Gly Glu			
370	375	380	
Thr Leu His Thr Phe Tyr Thr Gln Leu Val Leu Met Pro Lys Val Met			
385	390	395	400
His Tyr Ala Gln Tyr Val Leu Leu Ala Leu Gly Cys Val Leu Leu Leu			
405	410	415	
Val Pro Val Ile Cys Gln Ile Arg Ser Gln Val Gly Ala Gly Gln Arg			
420	425	430	
Ala Ala Arg Ala Asp Ser His Ser Leu Ala Cys Trp Gly Lys Gly Ala			
435	440	445	
Ser Asp Arg Thr Leu Trp Pro Thr Ala Ala Trp Ser Pro Pro Pro Ala			
450	455	460	
Ala Val Leu Arg Leu Cys Arg Ser Gly Ser Gly His Cys Trp Gly Leu			
465	470	475	480
Arg Ser Thr Leu Ala Ser Phe Ala Cys Arg Val Ala Thr Thr Leu Pro			
485	490	495	

Val Leu Glu Gly Leu Gly Pro Ser Leu Gly Gly Gly Thr Gly Gly Leu
 500 505 510

<210> 3628

<211> 444

<212> PRT

<213> Homo sapiens

<400> 3628

Met Glu Asn Ser Gly Lys Ala Asn Lys Lys Asp Thr His Asp Gly Pro
 1 5 10 15
 Pro Lys Glu Ile Lys Leu Pro Thr Ser Glu Ala Leu Leu Asp Tyr Gln
 20 25 30
 Cys Gln Ile Lys Glu Asp Ala Val Glu Gln Phe Met Phe Gln Ile Lys
 35 40 45
 Thr Leu Arg Lys Lys Asn Gln Lys Tyr His Glu Arg Asn Ser Arg Leu
 50 55 60
 Lys Glu Glu Gln Ile Trp His Ile Arg His Leu Leu Lys Glu Leu Ser
 65 70 75 80
 Glu Glu Lys Ala Glu Gly Leu Pro Val Val Thr Arg Glu Asp Val Glu
 85 90 95
 Glu Ala Met Lys Glu Lys Trp Lys Phe Glu Arg Asp Gln Glu Lys Asn
 100 105 110
 Leu Arg Asp Met Arg Met Gln Ile Ser Asn Ala Glu Lys Leu Phe Leu
 115 120 125
 Glu Lys Leu Ser Glu Lys Glu Tyr Trp Glu Glu Tyr Lys Asn Val Gly
 130 135 140
 Ser Glu Arg His Ala Lys Leu Ile Thr Ser Leu Gln Asn Asp Ile Asn
 145 150 155 160
 Thr Val Lys Glu Asn Ala Glu Lys Met Ser Glu His Tyr Lys Ile Thr
 165 170 175
 Leu Glu Asp Thr Arg Lys Lys Ile Ile Lys Glu Thr Leu Leu Gln Leu
 180 185 190
 Asp Gln Lys Lys Glu Trp Ala Thr Gln Asn Ala Val Lys Leu Ile Asp
 195 200 205

Lys Gly Ser Tyr Leu Glu Ile Trp Glu Asn Asp Trp Leu Lys Lys Glu
 210 215 220
 Val Ala Ile His Arg Lys Glu Val Glu Glu Leu Lys Asn Ala Ile His
 225 230 235 240
 Glu Leu Glu Ala Glu Asn Leu Val Leu Ile Asp Gln Leu Ser Asn Cys
 245 250 255
 Arg Leu Val Asp Leu Lys Ile Pro Arg Tyr Pro Val Leu His Ser Cys
 260 265 270
 Pro Thr Ser Asn Pro Arg His Leu Leu Leu Leu Pro Leu Glu Ser Cys
 275 280 285
 Leu Ile Ser Ala Arg Arg Cys Trp Arg Leu Tyr Leu Thr Gln Ala Ala
 290 295 300
 Gly Leu Glu Val Pro Pro Glu Glu Met Ser Leu Glu Leu Pro Glu Thr
 305 310 315 320
 His Ile Glu Glu Lys Ser Glu Leu Gln Pro Thr Glu Val Glu Ser Arg
 325 330 335
 Asp Leu Met Ser Ser Ser Asp Glu Ser Thr Ile Leu His Leu Ser His
 340 345 350
 Glu Asn Ser Ile Glu Asp Leu Gln Tyr Val Lys Ile Asp Lys Glu Glu
 355 360 365
 Asn Ser Gly Thr Glu Phe Gly Asp Thr Asp Met Lys Tyr Leu Leu Tyr
 370 375 380
 Glu Asp Glu Lys Asp Phe Lys Asp Tyr Val Asn Leu Gly Pro Leu Gly
 385 390 395 400
 Val Lys Leu Met Ser Val Glu Ser Lys Lys Met Pro Ile His Phe Gln
 405 410 415
 Glu Lys Glu Ile Pro Val Lys Leu Tyr Lys Asp Val Arg Ser Pro Glu
 420 425 430
 Ser His Ile Thr Tyr Lys Met Met Lys Ser Phe Leu
 435 440

<210> 3629

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3629

Met Leu Ser Asn Leu His Glu Leu Leu Pro Asn His Leu Met Glu Thr
 1 5 10 15
 Leu Tyr Ser Arg Lys Ser Glu Glu Asp Lys Lys Lys Cys Glu Asn Pro
 20 25 30
 Glu Leu Ser Gly Leu Glu Arg Ile Leu Ala Arg His Gln Leu Pro Lys
 35 40 45
 Glu Ile Asn Leu Thr Pro Lys Pro Asn Arg Met Pro Pro Trp Lys Arg
 50 55 60
 Lys Ile Ile Asn Asn Val Thr Asp Gly Trp Lys Lys Cys His Leu Leu
 65 70 75 80
 Lys Arg Asn Thr Lys Glu Pro Pro Met Ser Thr Ile Val Val Ser Asn
 85 90 95
 Thr Ile Pro Ser Ile Leu Leu Pro Cys Tyr Met Ala Glu Lys Glu His
 100 105 110
 Ala Thr His
 115

<210> 3630

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3630

Met Cys Lys His Gly Pro Phe Thr Phe Leu Tyr Leu Pro Cys Arg Ile
 1 5 10 15
 Phe Thr Lys Ile Leu Gly Gly Gly Ala Val Asn Ile Ala His Tyr Ala
 20 25 30
 Arg Gln Glu Val Ile Asn Val Ser Pro Gly Tyr Gln Leu Val Arg Asn
 35 40 45
 Arg Glu Gln Ile Ser Val Thr Leu Gly Asp Glu Met Phe Asp Arg Lys
 50 55 60
 Lys Arg Trp Glu Ser Glu Ile Pro Asp Lys Gly Arg Phe Ser Arg Thr
 65 70 75 80

Asn Ile Ile Ser Asp Leu Glu Glu Gln Ile Ser Glu Leu Thr Ala Ile
 85 90 95
 Ile Glu Gln Met Asn Arg Asp His Gln Ser Ala Gln Lys Leu Gly Ala
 100 105 110
 Gln Arg Gly Pro
 115

<210> 3631

<211> 356

<212> PRT

<213> Homo sapiens

<400> 3631

Met Asp Thr Gln Gly Pro Val Ser Gln Pro Phe Gln Gln Pro Glu Lys
 1 5 10 15
 Pro Gly Arg Val Arg Arg Arg Lys Thr Arg Arg Glu Arg Asn Lys Ala
 20 25 30
 Leu Val Gly Ser Arg Arg Pro Leu Ala His His Asp Pro Pro Val Ala
 35 40 45
 Ile Arg Asp Pro Pro Val Val Pro Thr Ala Ser Lys Leu Val Val Ile
 50 55 60
 Thr Gln Gly Arg Leu Ser Arg Glu His Arg Gly Leu Phe Asn His Glu
 65 70 75 80
 Val Lys Ser Leu Asp Val Ala Arg Leu Leu Ser Ser Gly Thr Leu Val
 85 90 95
 Pro Gly Ser Pro Thr Leu Pro Ala Lys Pro Ser Pro Ser Pro Gly Arg
 100 105 110
 Ala Gln Glu Pro Ala Pro Arg Ser Arg Asp Lys Glu Asn Gln Val Pro
 115 120 125
 Gly Gly Ser Gly Pro Gly Pro Pro Ser Ser Pro Glu Leu Ser Gly Val
 130 135 140
 Gly Gln Leu Leu Ala Glu Leu Gln Cys Gln Leu Ser Leu Pro Gln Ala
 145 150 155 160
 Phe Pro Arg Arg Asn Leu Ile Gln Asp Ala Arg Asp Ala Ile Val His
 165 170 175

Thr Leu Gln Ala Cys His Gly Cys Val Pro Asp Leu Ala Leu Val Leu
 180 185 190
 Arg Gly Cys Gln Pro Pro Leu Pro Gly Ala Lys Pro Gly Val Ser Glu
 195 200 205
 Arg Lys Met Thr Pro Phe Trp Ile Asn Ser Pro Asp Gln Val Pro Glu
 210 215 220
 Gln Glu Arg Gln Arg Lys Gln Gln Gly Thr Lys Glu Phe Thr Phe Pro
 225 230 235 240
 Met Pro Tyr Thr Ser Ser Met Pro Thr Ala His Arg Gly Ser Leu Ala
 245 250 255
 Pro Pro Arg Gly Pro Trp Pro Pro Tyr Phe Pro Ser Leu Ser Ser Pro
 260 265 270
 Ser Gly Thr Ala Trp Gly Pro Pro Thr Ala Phe Asp Leu Leu Lys Ser
 275 280 285
 Ile Trp Leu Val Ala Thr Pro Pro Pro Pro Arg Pro Trp Gly Val Gly
 290 295 300
 Leu Pro Gln Pro Leu Pro Gln Pro Ser Ser Pro Leu Leu Pro Arg Thr
 305 310 315 320
 Ser Val Leu Asp Trp Ser Pro Ser Pro Pro Ser Pro Leu Pro Ser Leu
 325 330 335
 Ser Trp Val Val Ala Gln Ser Ser Pro Glu Ala Trp Ser Phe Pro Pro
 340 345 350
 Met Arg Leu Tyr
 355

<210> 3632

<211> 571

<212> PRT

<213> Homo sapiens

<400> 3632

Met Val Gly Glu Gly Pro Tyr Leu Ile Ser Asp Leu Asp Gln Arg Gly
 1 5 10 15
 Arg Arg Arg Ser Phe Ala Glu Arg Tyr Asp Pro Ser Leu Lys Thr Met
 20 25 30

Ile Pro Val Arg Pro Cys Ala Arg Leu Ala Pro Asn Pro Val Asp Asp
 35 40 45
 Ala Gly Leu Leu Ser Phe Ala Thr Phe Ser Trp Leu Thr Pro Val Met
 50 55 60
 Val Lys Gly Tyr Arg Gln Arg Leu Thr Val Asp Thr Leu Pro Pro Leu
 65 70 75 80
 Ser Thr Tyr Asp Ser Ser Asp Thr Asn Ala Lys Arg Phe Arg Val Leu
 85 90 95
 Trp Asp Glu Glu Val Ala Arg Val Gly Pro Glu Lys Ala Ser Leu Ser
 100 105 110
 His Val Val Trp Lys Phe Gln Arg Thr Arg Val Leu Met Asp Ile Val
 115 120 125
 Ala Asn Ile Leu Cys Ile Ile Met Ala Ala Ile Gly Pro Thr Val Leu
 130 135 140
 Ile His Gln Ile Leu Gln Gln Thr Glu Arg Thr Ser Gly Lys Val Trp
 145 150 155 160
 Val Gly Ile Gly Leu Cys Ile Ala Leu Phe Ala Thr Glu Phe Thr Lys
 165 170 175
 Val Phe Phe Trp Ala Leu Ala Trp Ala Ile Asn Tyr Arg Thr Ala Ile
 180 185 190
 Arg Leu Lys Val Ala Leu Ser Thr Leu Val Phe Glu Asn Leu Val Ser
 195 200 205
 Phe Lys Thr Leu Thr His Ile Ser Val Gly Glu Val Leu Asn Ile Leu
 210 215 220
 Ser Ser Asp Ser Tyr Ser Leu Phe Glu Ala Ala Leu Phe Cys Pro Leu
 225 230 235 240
 Pro Ala Thr Ile Pro Ile Leu Met Val Phe Cys Val Ala Tyr Ala Phe
 245 250 255
 Phe Ile Leu Gly Pro Thr Ala Leu Ile Gly Ile Ser Val Tyr Val Ile
 260 265 270
 Phe Ile Pro Val Gln Met Phe Met Ala Lys Leu Asn Ser Ala Phe Arg
 275 280 285
 Arg Ser Ala Ile Leu Val Thr Asp Lys Arg Val Gln Thr Met Asn Glu
 290 295 300
 Phe Leu Thr Cys Ile Arg Leu Ile Lys Met Tyr Ala Trp Glu Lys Ser

305 310 315 320
 Phe Thr Asn Thr Ile Gln Asp Ile Arg Arg Arg Glu Arg Lys Leu Leu
 325 330 335
 Glu Lys Ala Gly Phe Val Gln Ser Gly Asn Ser Ala Leu Ala Pro Ile
 340 345 350
 Val Ser Thr Ile Ala Ile Val Leu Thr Leu Ser Cys His Ile Leu Leu
 355 360 365
 Arg Arg Lys Leu Thr Ala Pro Val Ala Phe Ser Val Ile Ala Met Phe
 370 375 380
 Asn Val Met Lys Phe Ser Ile Ala Ile Leu Pro Phe Ser Ile Lys Ala
 385 390 395 400
 Met Ala Glu Ala Asn Val Ser Leu Arg Arg Met Lys Lys Ile Leu Ile
 405 410 415
 Asp Lys Ser Pro Pro Ser Tyr Ile Thr Gln Pro Glu Asp Pro Asp Thr
 420 425 430
 Val Leu Leu Leu Ala Asn Ala Thr Leu Thr Trp Glu His Glu Ala Ser
 435 440 445
 Arg Lys Ser Thr Pro Lys Lys Leu Gln Asn Gln Lys Arg His Leu Cys
 450 455 460
 Lys Lys Gln Arg Ser Glu Ala Tyr Ser Glu Arg Ser Pro Pro Ala Lys
 465 470 475 480
 Gly Ala Thr Gly Pro Glu Glu Gln Ser Asp Ser Leu Lys Ser Val Leu
 485 490 495
 His Ser Ile Ser Phe Val Val Arg Lys Gly Lys Ile Leu Gly Ile Cys
 500 505 510
 Gly Asn Val Gly Ser Gly Lys Ser Ser Leu Leu Ala Ala Leu Leu Gly
 515 520 525
 Gln Met Gln Leu Gln Lys Gly Val Val Ala Val Asn Gly Thr Leu Ala
 530 535 540
 Tyr Val Ser Gln Gln Ala Trp Ile Phe His Gly Asn Val Arg Glu Asn
 545 550 555 560
 Ile Leu Phe Gly Glu Lys Tyr Asp His Gln Arg
 565 570

<211> 417

<212> PRT

<213> Homo sapiens

<400> 3633

```

Met Pro Gln Pro Ser Val Ser Gly Met Asp Pro Pro Phe Gly Asp Ala
  1              5              10              15
Phe Arg Ser His Thr Phe Ser Glu Gln Thr Leu Met Ser Thr Asp Leu
      20              25              30
Leu Ala Asn Ser Ser Asp Pro Asp Phe Met Tyr Glu Leu Asp Arg Glu
      35              40              45
Met Asn Tyr Gln Gln Asn Pro Arg Asp Asn Phe Leu Ser Leu Glu Asp
      50              55              60
Cys Lys Asp Ile Glu Asn Leu Glu Ser Phe Thr Asp Val Leu Asp Asn
      65              70              75              80
Glu Gly Ala Leu Thr Ser Asn Trp Glu Gln Trp Asp Thr Tyr Cys Glu
      85              90              95
Asp Leu Thr Lys Tyr Thr Lys Leu Thr Ser Cys Asp Ile Trp Gly Thr
      100             105             110
Lys Glu Val Asp Tyr Leu Gly Leu Asp Asp Phe Ser Ser Pro Tyr Gln
      115             120             125
Asp Glu Glu Val Ile Ser Lys Thr Pro Thr Leu Ala Gln Leu Asn Ser
      130             135             140
Glu Asp Ser Gln Ser Val Ser Asp Ser Leu Tyr Tyr Pro Asp Ser Leu
      145             150             155             160
Phe Ser Val Lys Gln Asn Pro Leu Pro Ser Ser Phe Pro Gly Lys Lys
      165             170             175
Ile Thr Ser Arg Ala Ala Ala Pro Val Cys Ser Ser Lys Thr Leu Gln
      180             185             190
Ala Glu Val Pro Leu Ser Asp Cys Val Gln Lys Ala Ser Lys Pro Thr
      195             200             205
Ser Ser Thr Gln Ile Met Val Lys Thr Asn Met Tyr His Asn Glu Lys
      210             215             220
Val Asn Phe His Val Glu Cys Lys Asp Tyr Val Lys Lys Ala Lys Val
      225             230             235             240
Lys Ile Asn Pro Val Gln Gln Ser Arg Pro Leu Leu Ser Gln Ile His

```

	245		250		255										
Thr	Asp	Ala	Ala	Lys	Glu	Asn	Thr	Cys	Tyr	Cys	Gly	Ala	Val	Ala	Lys
	260		265		270										
Arg	Gln	Glu	Lys	Lys	Gly	Met	Glu	Pro	Leu	Gln	Gly	His	Ala	Thr	Pro
	275		280		285										
Ala	Leu	Pro	Phe	Lys	Glu	Thr	Gln	Glu	Leu	Leu	Leu	Ser	Pro	Leu	Pro
	290		295		300										
Gln	Glu	Gly	Pro	Gly	Ser	Leu	Ala	Ala	Gly	Glu	Ser	Ser	Ser	Leu	Ser
305			310		315				320						
Ala	Ser	Thr	Ser	Val	Ser	Asp	Ser	Ser	Gln	Lys	Lys	Glu	Glu	His	Asn
	325		330		335										
Tyr	Ser	Leu	Phe	Val	Ser	Asp	Asn	Leu	Gly	Glu	Gln	Pro	Thr	Lys	Cys
	340		345		350										
Ser	Pro	Glu	Glu	Asp	Glu	Glu	Asp	Glu	Glu	Asp	Val	Asp	Asp	Glu	Asp
	355		360		365										
His	Asp	Glu	Gly	Phe	Gly	Ser	Glu	His	Glu	Leu	Ser	Glu	Asn	Glu	Glu
	370		375		380										
Glu	Glu	Glu	Glu	Glu	Glu	Asp	Tyr	Glu	Asp	Asp	Lys	Asp	Asp	Asp	Ile
385			390		395										400
Ser	Asp	Thr	Phe	Ser	Glu	Pro	Gly	Ile	Ile	Met	Leu	Ala	Ser	Leu	Pro
	405		410		415										
Asp															

<210> 3634

<211> 157

<212> PRT

<213> Homo sapiens

<400> 3634

Met	Trp	Arg	Gln	Glu	Glu	Glu	Leu	Arg	Asp	Gln	Glu	Lys	Leu	Arg	Lys
1				5						10				15	
His	Glu	Glu	Lys	Thr	Trp	Arg	Gln	Glu	Gln	Arg	Leu	Arg	Asp	Gln	Glu
			20					25					30		
Lys	Glu	Leu	Arg	Lys	Gln	Glu	Lys	Gln	Met	Leu	Lys	Gln	Lys	Glu	Gln

35 40 45
 Met Ala Glu Gln Glu Glu Gln Met Gln Lys Gln Glu Glu Gln Val Arg
 50 55 60
 Lys Gln Glu Glu Gln Val Arg Lys Gln Glu Glu Gln Met Trp Lys Gln
 65 70 75 80
 Glu Glu Gln Met Arg Lys Gln Glu Glu Gln Met Arg Lys Gln Glu Lys
 85 90 95
 Gln Met Gly Glu Gln Glu Glu Gln Met Arg Lys Arg Glu Glu Gln Met
 100 105 110
 Arg Lys Arg Glu Glu Gln Ile Thr Gln Leu Pro Pro Gly Met Lys Asn
 115 120 125
 Thr Gln Glu His Pro Gly Leu Gly Ser Thr Ser Cys Ile Leu Phe Phe
 130 135 140
 Tyr Arg Gly Asp Lys Lys Lys Ile Lys Ile Ile Asn Ile
 145 150 155

<210> 3635

<211> 169

<212> PRT

<213> Homo sapiens

<400> 3635

Met Thr Pro Pro Met Arg Thr Gln Gly Thr Glu Thr Lys Ser Lys Lys
 1 5 10 15
 Ala Leu Arg Val Glu Gly Ser Ser Gly Ala Lys Gly Arg Val Arg Ala
 20 25 30
 Thr Pro Ala Arg Arg His Phe Gln Thr Asp Leu Pro Ala Pro Arg Asn
 35 40 45
 Arg Ser Arg Pro Pro Ser Ser Cys Ile Leu Asp Pro Thr Gln Thr Arg
 50 55 60
 Ser Arg Thr His Leu Pro Arg Ala Pro Gln Thr Leu Thr Ala Ser Gly
 65 70 75 80
 Ala Ala Asp Thr Asp Gln Val Pro His Ser Leu Gly Leu Gln Gly Arg
 85 90 95
 Ser Arg Arg Pro Leu Thr Leu Arg Glu Ala Leu Thr Asp Gly Ala Leu

```

          100          105          110
Pro Arg Leu Ala Ser Thr Pro Arg Gln Arg Leu Pro Ile Ala Val Arg
          115          120          125
Leu Pro Gly Ile Gly Pro Ala Ala Thr Pro Ala Cys Arg Pro Arg Gly
          130          135          140
Thr Val Ala Leu Pro Val Pro Glu Gly Thr Arg Asp Thr Cys Ser Thr
          145          150          155          160
Ala Ile Pro Tyr Thr Cys Glu Ala Pro
          165

```

<210> 3636

<211> 132

<212> PRT

<213> Homo sapiens

<400> 3636

```

Met Ile His Leu Lys Gly Ser Ser Ser Gly Glu Ser Gln Tyr Leu Pro
  1              5              10              15
Gln His Cys Arg Met Gly Arg Ser Leu Pro Pro Thr His Ser Thr His
          20              25              30
Leu Thr Pro Pro Phe Gln Gly Lys Asp Leu Arg Ala Ala Gly Glu Ser
          35              40              45
Glu Ile Gly Arg His Gly Ala Asn Trp Ala Thr Ala Arg Asp Leu Glu
          50              55              60
Pro Thr Pro Leu Asn Ser Glu His Arg Lys Arg Arg Gln Ala Arg Arg
          65              70              75              80
Gly Gln Glu Ala Asp Thr Arg Ala Gly Gln Arg Asn Gly Gly Glu His
          85              90              95
Thr His Ala Leu Arg Ser Lys Ala Glu Arg Cys Glu Phe Thr Lys Thr
          100             105             110
Gly Val His Arg Pro Ile Thr Asp Thr Asp Pro Gly Trp Pro Gly Ala
          115             120             125
Pro His Thr Gly
          130

```

<210> 3637

<211> 136

<212> PRT

<213> Homo sapiens

<400> 3637

```

Met Glu Cys Asn Gly Leu Ile Leu Ala His Cys Asn Leu Cys Leu Pro
  1             5             10             15
Gly Ser Gly Asp Ser Pro Ala Ser Ala Ser Gln Val Ala Gly Thr Thr
      20             25             30
Gly Thr His His Cys Thr Gln Leu Ile Phe Val Phe Leu Val Glu Thr
      35             40             45
Glu Phe His His Val Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser Ser
      50             55             60
Asp Leu Pro Ala Ser Ala Ser Gln Asn Ala Gly Ile Thr Gly Val Ser
      65             70             75             80
His Trp Ala Trp Thr Leu Phe Phe Tyr Phe Leu Asn Lys Leu Thr Phe
      85             90             95
Ala Leu Gln Thr His Pro Glu Phe Phe Phe Phe Phe Phe Glu Thr
      100            105            110
Gly Ser His Cys Val Ala Gln Val Glu Trp His Tyr Leu Gly Ser Leu
      115            120            125
Gln Pro Pro Pro Pro Arg Phe Lys
      130            135

```

<210> 3638

<211> 114

<212> PRT

<213> Homo sapiens

<400> 3638

```

Met Met Gly Ile Phe Asn Gly Lys Ala Val Thr Gln Pro Lys Arg Gly
  1             5             10             15
Thr Ile Ser Glu Ala Ser Arg Gln Lys Ser Leu Asp Arg Arg Ser Asn

```


20 25 30
 Glu Pro Gly Arg Glu His Arg Ala Gly Ala His Val Glu Asn Leu Leu
 35 40 45
 Arg Asn Leu Leu Glu Ala Glu Lys Thr Leu Gly Lys Ser Ser Ser His
 50 55 60
 Gly Ser Gly Ile Pro Trp Ile Val Arg Pro Ala Phe Val Phe Ser Leu
 65 70 75 80
 Ser Leu Phe Leu Ala Val Pro Pro Gly Ser His Ser Cys Ser Arg Asn
 85 90 95
 Gln Ala Arg Ser Gly Cys Ile Phe Trp Arg Leu Asn Asn Lys Lys Gln
 100 105 110
 Thr Asn

<210> 3639

<211> 164

<212> PRT

<213> Homo sapiens

<400> 3639

Met Phe Ile Trp Asn Leu Ile Ser Thr Trp Gly Leu Val Ile Thr Trp
 1 5 10 15
 Val Leu Gly Ile His Leu Gly Leu Glu Tyr Pro Pro Gly Ala Leu Ser
 20 25 30
 Phe Thr Arg Asp Ser Cys Leu Pro Trp Thr Trp Val Tyr Ile Cys Cys
 35 40 45
 Leu Met Tyr Thr Leu Arg Val Met Ser Thr Trp Gly Gln Met Ser Ser
 50 55 60
 Trp Gly Leu Ser Val His Leu Val Ser Asp Val Cys Leu Gly Thr Cys
 65 70 75 80
 Val His Leu Arg Pro Asp Ile His Leu Gly Thr Gly Arg Pro Arg Gly
 85 90 95
 Ala Asp Val Gln Leu Asp Thr Gly Tyr Pro Pro Gly Ala Trp Gly Ser
 100 105 110
 Ile Gln Lys Leu Met Ser Asn Trp Gly Leu Met Ser Thr Cys Gly Leu

115 120 125
 Gly Ile His Val Arg Leu Asp Val His Pro Arg Pro Asp Val His Leu
 130 135 140
 Met Leu Asp Val His Leu Thr Pro Gly Cys Leu Leu Glu Thr Ser Cys
 145 150 155 160
 Pro Thr Arg Ile

<210> 3640

<211> 459

<212> PRT

<213> Homo sapiens

<400> 3640

Met Ala Gly Thr Arg Trp Val Leu Gly Ala Leu Leu Arg Gly Cys Gly
 1 5 10 15
 Cys Asn Cys Ser Ser Cys Arg Arg Thr Gly Ala Ala Cys Leu Pro Phe
 20 25 30
 Tyr Ser Ala Ala Ala Ala Ala Ser Gln Thr Arg Gly Leu Gln Thr Gly
 35 40 45
 Pro Val Pro Pro Gly Arg Leu Ala Gly Pro Pro Ala Val Ala Thr Ser
 50 55 60
 Ala Ala Ala Ala Ala Ala Ala Ser Tyr Pro Ala Leu Arg Ala Ser Leu
 65 70 75 80
 Leu Pro Gln Ser Leu Ala Ala Ala Ala Ala Val Pro Thr Arg Ser Tyr
 85 90 95
 Ser Gln Glu Ser Lys Thr Thr Tyr Leu Glu Asp Leu Pro Pro Pro Pro
 100 105 110
 Glu Tyr Glu Leu Ala Pro Ser Lys Leu Glu Glu Glu Val Asp Asp Val
 115 120 125
 Phe Leu Ile Arg Ala Gln Gly Leu Pro Trp Ser Cys Thr Met Glu Asp
 130 135 140
 Val Leu Asn Phe Phe Ser Asp Cys Arg Ile Arg Asn Gly Glu Asn Gly
 145 150 155 160
 Ile His Phe Leu Leu Asn Arg Asp Gly Lys Arg Arg Gly Asp Ala Leu

	165		170		175
Ile Glu Met	Glu Ser Glu Gln Asp Val	Gln Lys Ala Leu	Glu Lys His		
	180		185		190
Arg Met Tyr	Met Gly Gln Arg Tyr Val	Glu Val Tyr Glu	Ile Asn Asn		
	195		200		205
Glu Asp Val	Asp Ala Leu Met Lys Ser	Leu Gln Val Lys	Ser Ser Pro		
	210		215		220
Val Val Asn	Asp Gly Val Val Arg Leu	Arg Gly Leu Pro	Tyr Ser Cys		
225		230		235	240
Asn Glu Lys	Asp Ile Val Asp Phe Phe	Ala Gly Leu Asn	Ile Val Asp		
	245		250		255
Ile Thr Phe	Val Met Asp Tyr Arg Gly	Arg Arg Lys Thr	Gly Glu Ala		
	260		265		270
Tyr Val Gln	Phe Glu Glu Pro Glu Met	Ala Asn Gln Ala	Leu Leu Lys		
	275		280		285
His Arg Glu	Glu Ile Gly Asn Arg Tyr	Ile Glu Ile Phe	Pro Ser Arg		
	290		295		300
Arg Asn Glu	Val Arg Thr His Val Gly	Ser Tyr Lys Gly	Lys Lys Ile		
305		310		315	320
Ala Ser Phe	Pro Thr Ala Lys Tyr Ile	Thr Glu Pro Glu	Met Val Phe		
	325		330		335
Glu Glu His	Glu Val Asn Glu Asp Ile	Gln Pro Met Thr	Ala Phe Glu		
	340		345		350
Ser Glu Lys	Glu Ile Glu Leu Pro Lys	Glu Val Pro Glu	Lys Leu Pro		
	355		360		365
Glu Ala Ala	Asp Phe Gly Thr Thr Ser	Ser Leu His Phe	Val His Met		
	370		375		380
Arg Gly Leu	Pro Phe Gln Ala Asn Ala	Gln Asp Ile Ile	Asn Phe Phe		
385		390		395	400
Ala Pro Leu	Lys Pro Val Arg Ile Thr	Met Glu Tyr Ser	Ser Ser Gly		
	405		410		415
Lys Ala Thr	Gly Glu Ala Asp Val His	Phe Glu Thr His	Glu Asp Ala		
	420		425		430
Val Ala Ala	Met Leu Lys Asp Arg Ser	His Val His His	Arg Tyr Ile		
	435		440		445
Glu Leu Phe	Leu Asn Ser Cys Pro Lys	Gly Lys			

450

455

<210> 3641

<211> 572

<212> PRT

<213> Homo sapiens

<400> 3641

```

Met Pro Val Tyr Cys Lys Tyr Gln Phe His Lys Thr Pro Val His Lys
  1             5             10             15
Thr Lys Gly Glu Pro His Gly Thr His Val Tyr Phe Gln Asp Ile Asn
          20             25             30
Val Ile Phe Leu Gly Ala Leu His Pro Ser Asp Leu Arg Glu Tyr Leu
      35             40             45
Glu Gly Pro Pro Met Val Val Glu Val His Asp Arg Asp Arg Lys Ser
      50             55             60
Glu Glu Cys Ser Gln Lys Pro Val Leu Phe Gly Glu Asp Pro Leu Asp
      65             70             75             80
Ser Tyr Leu Asn Phe Gln Ala Leu Ile Ser Pro Arg Glu Thr Glu Asn
          85             90             95
Asn Pro Phe Glu Ser Gln Asn Lys Met Trp Tyr Pro Tyr Gly Ile Ala
      100             105             110
Gln Val Ser Phe Ala Asp Leu Leu Leu Gly His Lys Tyr Leu Asn Leu
      115             120             125
Ala Val Pro Ile His Ser Cys Glu Val Gln Pro Thr His Cys Gly Gln
      130             135             140
Asp Ser Arg Arg Arg Lys Val Val Gly Leu Gly Val Pro Arg Asp Gly
      145             150             155             160
His Gln His Gly Pro Met Pro Arg Gly Asn Tyr Leu Glu Ala Asp Ser
          165             170             175
Gln Leu Lys Leu Arg Val Asp Ile Ala Val Pro Leu Arg Ala Gly Ala
      180             185             190
Arg Ala Ala Asp Pro Asp Leu Gly Gly Ser Gln Phe Gly Arg Ile Ile
      195             200             205
Phe Val Phe Asp Phe Lys Lys Val Ser Leu Leu His Ser Leu Leu Gln

```

210	215	220	
Asp Ile Thr Met Ile Asn Ala Lys Ala Leu Gly Leu Asp Ser Tyr Pro			
225	230	235	240
Val Arg Thr Leu Gln Gln Ile Leu Ser Ala Phe Lys Val Arg Val Arg			
	245	250	255
Val Gln Glu Gln Gln His Leu Asp Val Leu Thr Gly Phe His Leu Leu			
	260	265	270
Asp Gly Lys Thr His Leu Phe Ile Leu Glu Gly Leu Ala Asp Gln Gly			
	275	280	285
Leu Arg Gln Leu Trp Glu Asn His Gln Ser Trp Ile Pro Arg Ser Glu			
	290	295	300
His Arg Lys Tyr Lys Val Leu Tyr Asn Ser Gln Leu Leu Phe Arg Ser			
305	310	315	320
Arg Leu Tyr Gly Asp Leu Glu Ala Ile Leu Tyr His Val His Leu Phe			
	325	330	335
Gln Pro Thr Glu Leu Leu Leu Gln Gln Ala Val Phe Phe Leu Arg Asp			
	340	345	350
Thr Glu Arg Arg Arg Val Phe Gln Ala Leu Ala Arg Ile His Asp Ile			
	355	360	365
Cys Tyr Asn Ser Thr Thr Leu Trp Asp Val Thr Val Arg Asp Leu Leu			
	370	375	380
Pro Ser Ser Ala Met Ile Lys Asp Leu Ser Gln Glu Phe Gly Met Pro			
385	390	395	400
Leu Ser Gln Glu Glu Leu Thr Asp Glu Lys Leu Phe Ala Leu Pro Pro			
	405	410	415
Gln Pro Ala Pro Asn Leu Glu Asp Tyr His Ser Arg Asn Ser Thr Leu			
	420	425	430
Thr Leu Glu Ile His Ala His Gln Glu Pro Arg Lys Arg Phe Thr Tyr			
	435	440	445
Ser Gln Asp Tyr Leu Ser Ala Met Val Glu Pro Leu Asp Leu Lys Glu			
	450	455	460
Glu Glu Lys Lys Ala Gln Lys Lys Ser Arg Gln Ala Trp Leu Thr Ala			
465	470	475	480
Arg Gly Phe Gln Val Thr Gly Leu Gln Ser Asp Thr Glu Ser Ser Phe			
	485	490	495
Gln Asp Leu Lys Leu Pro Pro Ile Lys Glu Leu Asn Glu Glu Trp Lys			

500 505 510
 Glu Asn Ser Leu Phe Ala Asn Val Leu Glu Pro Val Leu Asp Arg Asp
 515 520 525
 Arg Trp Ser Trp Asp Arg His His Val Asp Phe Asp Leu Tyr Lys Lys
 530 535 540
 Pro Pro Pro Phe Leu Glu Leu Leu Pro Ser Pro Ala Pro Lys Pro Val
 545 550 555 560
 Thr Val Arg Lys Lys Lys Gly Asn Ser Pro Ile Ser
 565 570

<210> 3642

<211> 673

<212> PRT

<213> Homo sapiens

<400> 3642

Met Asp His Ser Cys Thr Arg Phe Ile His Arg Arg Gly Pro Pro Thr
 1 5 10 15
 Arg Thr Arg Ala Gly Phe Lys Arg Gly Lys Arg Pro Arg Ile Gln Gln
 20 25 30
 Arg Pro Arg Ala Arg Val Ser Gly Thr Ile Pro Ala Ser Arg Leu His
 35 40 45
 Pro Ala Pro Ala Ser Gln Pro Gly Pro Cys Pro Ala Pro Gly His Cys
 50 55 60
 Pro Val Gly Pro Ala His Glu Arg Pro Met Gly Ser Ser Gln Glu Glu
 65 70 75 80
 Gly Leu Arg Cys Gln Pro Ser Gln Pro Asp His Asp Ala Asp Gly His
 85 90 95
 Cys Gly Pro Asp Leu Glu Gly Ala Glu Arg Ala Ser Ala Thr Pro Gly
 100 105 110
 Pro Pro Gly Leu Leu Asn Ser His Arg Pro Ala Asp Ser Asp Asp Thr
 115 120 125
 Asn Ala Ala Gly Pro Ser Ala Ala Leu Leu Glu Gly Leu Leu Leu Gly
 130 135 140
 Gly Gly Lys Pro Ser Pro His Ser Thr Arg Pro Gly Pro Phe Phe Tyr

145	150	155	160
Ile Gly Gly Ser Asn Gly Ala Thr Ile Ile Ser Ser Tyr Cys Lys Ser			
	165	170	175
Lys Gly Trp Gln Arg Ile His Asp Ser Arg Arg Asp Asp Tyr Thr Leu			
	180	185	190
Lys Trp Cys Glu Val Lys Ser Arg Asp Ser Tyr Gly Ser Phe Arg Glu			
	195	200	205
Gly Glu Gln Leu Leu Asp Gln Leu Pro Asn Asn Lys Leu Leu Thr Thr			
	210	215	220
Lys Ile Gly Leu Leu Ser Thr Leu Arg Gly Arg Ala Arg Ala Met Ser			
225	230	235	240
Lys Ala Ser Lys Val Pro Gly Gly Val Gln Ala Arg Leu Glu Lys Asp			
	245	250	255
Ala Ala Ala Pro Ala Leu Glu Asp Leu Pro Trp Thr Ser Pro Gly Tyr			
	260	265	270
Leu Arg Pro Gln Arg Val Leu Arg Met Glu Glu Phe Phe Pro Glu Thr			
	275	280	285
Tyr Arg Leu Asp Leu Lys His Glu Arg Glu Ala Phe Phe Thr Leu Phe			
	290	295	300
Asp Glu Thr Gln Ile Trp Ile Cys Lys Pro Thr Ala Ser Asn Gln Gly			
305	310	315	320
Lys Gly Ile Phe Leu Leu Arg Asn Gln Glu Glu Val Ala Ala Leu Gln			
	325	330	335
Ala Lys Thr Arg Ser Met Glu Asp Asp Pro Ile His His Lys Thr Pro			
	340	345	350
Phe Arg Gly Pro Gln Ala Arg Val Val Gln Arg Tyr Ile Gln Asn Pro			
	355	360	365
Leu Leu Val Asp Gly Arg Lys Phe Asp Val Arg Ser Tyr Leu Leu Ile			
	370	375	380
Ala Cys Thr Thr Pro Tyr Met Ile Phe Phe Gly His Gly Tyr Ala Arg			
385	390	395	400
Leu Thr Leu Ser Leu Tyr Asp Pro His Ser Ser Asp Leu Gly Gly His			
	405	410	415
Leu Thr Asn Gln Phe Met Gln Lys Lys Ser Pro Leu Tyr Met Leu Leu			
	420	425	430
Lys Glu His Thr Val Trp Ser Met Glu His Leu Asn Arg Tyr Ile Ser			

435	440	445
Asp Thr Phe Trp Lys Ala Arg Gly Leu Ala Lys Asp Trp Val Phe Thr		
450	455	460
Thr Leu Lys Lys Arg Met Gln Gln Ile Met Ala His Cys Phe Leu Ala		
465	470	475
Ala Lys Pro Lys Leu Asp Cys Lys Leu Gly Tyr Phe Asp Leu Ile Gly		
485	490	495
Cys Asp Phe Leu Ile Asp Asp Asn Phe Lys Val Trp Leu Leu Glu Met		
500	505	510
Asn Ser Asn Pro Ala Leu His Thr Asn Cys Glu Val Leu Lys Glu Val		
515	520	525
Ile Pro Gly Val Val Ile Glu Thr Leu Asp Leu Val Leu Glu Thr Phe		
530	535	540
Arg Lys Ser Leu Arg Gly Gln Lys Met Leu Pro Leu Leu Ser Gln Arg		
545	550	555
Arg Phe Val Leu Leu His Asn Gly Glu Ala Asp Pro Arg Pro His Leu		
565	570	575
Gly Gly Ser Cys Ser Leu Arg Arg Trp Pro Pro Leu Pro Thr Arg Gln		
580	585	590
Ala Lys Ser Ser Gly Pro Pro Met Pro His Ala Pro Asp Gln Pro Gly		
595	600	605
Ala Arg Arg Pro Ala Pro Pro Pro Leu Val Pro Gln Arg Pro Arg Pro		
610	615	620
Pro Gly Pro Asp Leu Asp Ser Ala His Asp Gly Glu Pro Gln Ala Pro		
625	630	635
Gly Thr Glu Gln Ser Gly Thr Gly Asn Arg His Pro Ala Gln Glu Pro		
645	650	655
Ser Pro Gly Thr Ala Lys Glu Glu Arg Glu Glu Pro Glu Asn Ala Arg		
660	665	670
Pro		

<210> 3643

<211> 152

<212> PRT

<213> Homo sapiens

<400> 3643

```

Met Pro Ser Phe Ala Leu Val Pro Trp Ala Ala Val Gln Trp His His
 1             5             10             15
Leu Gly Ser Pro Gln Pro Pro Pro Pro Lys Phe Lys Arg Phe Ser Cys
      20             25             30
Leu Ser Leu Pro Ser Ile Trp Asp Tyr Arg Tyr Ala Pro Pro Arg Pro
      35             40             45
Ala Asn Phe Val Phe Leu Val Glu Thr Gly Phe Leu His Val Gly Gln
      50             55             60
Ala Gly Leu Glu Leu Pro Thr Ser Gly Asp Ser Pro Ala Ser Ala Ser
      65             70             75             80
Gln Ser Thr Gly Ile Thr Gly Val Ser His Cys Ala Trp Pro Thr Asn
      85             90             95
Thr Arg Phe Tyr Ser Gly Pro Phe Thr Val Asn Val Gly Gly Pro Trp
      100            105            110
Arg Met Ala Thr Pro Gly Leu Phe Ala Glu Ala Trp Thr Ala Gln Gln
      115            120            125
Ala Glu Leu Lys Gln Leu Arg Gln Tyr Gln Leu Lys Gly His Pro Ala
      130            135            140
Val Arg Val Pro Arg Leu Gln Glu
145            150

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<210> 3644

<211> 166

<212> PRT

<213> Homo sapiens

<400> 3644

```

Met Ser Arg Ala Leu Arg Pro Leu Ser Cys Leu Arg Pro Leu Ser Ser
 1             5             10             15
Pro Arg Ala Gly Thr Thr Gly Val Arg Val Thr Arg Thr Ser Trp Gly
      20             25             30
Ser Ala Trp Pro Ser Phe Gly Met Ser Pro Gly Gly Pro Arg Met Gly

```

35 40 45
 Gly Gly Trp Asp Leu Pro Asp Val His Glu Val Leu Ile His Ala Pro
 50 55 60
 Arg Val Leu Gly Ser Asp Arg Asp Gly Asn Pro Val Leu Leu Gln Glu
 65 70 75 80
 Arg Asp Ser Thr Gly Gly Gly Lys Ala Ala Gly Arg Thr Arg Glu Val
 85 90 95
 Arg Pro Arg Gly Pro Ala Phe Ser Glu Ser Pro Lys Leu Trp Pro Pro
 100 105 110
 Phe Arg Gln Asp Pro Gly Tyr Leu Leu Val Leu Val Thr Val Thr Ser
 115 120 125
 Leu Gly Gly Pro Tyr Cys Trp Thr Cys Pro Arg Glu Thr Ala Gly Pro
 130 135 140
 Cys Val Cys Asn Ala Asp Leu Gly Gly Ser Phe Gln Lys Thr Leu Ser
 145 150 155 160
 Leu His Leu Lys Asp Pro
 165

<210> 3645

<211> 293

<212> PRT

<213> Homo sapiens

<400> 3645

Met Asn Val Met Asn Val Gly Arg Pro Leu Gly Leu Val His Ser Leu
 1 5 10 15
 Phe Ser Ile Arg Glu Phe Ile Leu Lys Lys Asp Thr Met Asn Ala Met
 20 25 30
 Ser Val Ala Lys Pro Ser Ser Ile Ala Gln Ala Leu Leu Asp Thr Arg
 35 40 45
 Lys Phe Ile Leu Glu Lys Asn His Ile Cys Val Met Asn Val Gly Arg
 50 55 60
 Ala Ser Gly Arg Val Leu Ser Leu Ser Gly Ile Arg Glu Phe Ile Gln
 65 70 75 80
 Gly Thr Asn Pro Met Asn Val Met Asn Val Gly Lys Leu Leu Ala Arg

	85	90	95
Thr Gln Arg Leu Leu Asp Ile Leu Glu Phe Ile Leu Val Arg Ser Pro			
100	105	110	
Met Tyr Val Arg Asn Val Gly Arg Pro Ser Gly Gly Thr Gln Asn Phe			
115	120	125	
Leu Asp Met Arg Glu Phe Thr Leu Glu Arg Asn Pro Met Asn Ala Leu			
130	135	140	
Ser Val Glu Arg Leu Ser Gly Gly Pro Leu Thr Leu Leu Ser Thr Arg			
145	150	155	160
Glu Phe Ile Leu Glu Arg Asn Pro Ile Asn Val Met Ser Val Gln Glu			
165	170	175	
Pro Phe Gly Ile Ile Leu Ser Cys Phe Ser Thr Arg Lys Phe Ile Leu			
180	185	190	
Glu Arg Asn Leu Met Asn Val Ala Ser Val Arg Lys His Leu Ala Ser			
195	200	205	
Ile Pro Asn Leu Ser Tyr Ile Arg Glu Phe Thr Leu Glu Arg Ser Leu			
210	215	220	
Met Ser Ala Lys Asn Val Arg Arg Leu Leu Val Gly Ala Leu Thr Ser			
225	230	235	240
Ser Asp Ile Lys Val Phe Thr Val Trp Ser Asn Leu Gln Asn Arg Lys			
245	250	255	
Ala Phe Ser Gly Lys Ala Lys Val Gln Leu Ile His Leu Phe Ile Ile			
260	265	270	
Cys Lys Tyr Ala Pro Gln Val Phe Lys Ser Asn Glu Trp Thr Glu Pro			
275	280	285	
Pro Leu Ser Ser His			
290			

<210> 3646

<211> 139

<212> PRT

<213> Homo sapiens

<400> 3646

Met Asn Arg Glu His Ser Ala Ser Ile Pro Val Pro Leu Val Ala Leu

1	5	10	15
Gln Ser Ala Gly Thr Arg Arg Asn Gln Lys Pro Pro Gly Arg Ala Phe			
20	25	30	
Cys Leu Tyr Gly Val Lys Ala Val Ser Ser Asn Leu Cys Phe Leu Lys			
35	40	45	
Gln Arg Asn Asn Leu Asp Glu Thr Asn Phe Pro Gln Arg Lys Gly Arg			
50	55	60	
Ala His Ser Glu Leu Val Lys Lys Met Pro Gly Ala Gly Ser Ile Leu			
65	70	75	80
Lys Trp Lys Arg Trp Cys Leu Ala Met Leu Pro Lys Leu Val Leu Asn			
85	90	95	
Ser Trp His Gln Val Ile Leu Leu Pro Gln Pro Pro Lys Val Leu Gly			
100	105	110	
Leu Gln Asn Lys Thr Ile Ser Arg Arg Val Cys Gly Ile Leu Arg Thr			
115	120	125	
Asp Thr Gly Arg Asn Lys Gly Tyr Arg Ser Glu			
130	135		

<210> 3647

<211> 588

<212> PRT

<213> Homo sapiens

<400> 3647

Met Ala Asn Leu Cys Thr Pro Ser Ser Thr Ala Asn Ser Cys Ser Ser			
1	5	10	15
Ser Ala Ser Asn Thr Pro Gly Ala Pro Glu Thr His Pro Ser Ser Ser			
20	25	30	
Pro Thr Pro Thr Ser Ser Asn Thr Gln Glu Glu Ala Gln Pro Ser Ser			
35	40	45	
Val Ser Asp Leu Ser Pro Met Ser Met Pro Phe Ala Ser Asn Ser Glu			
50	55	60	
Pro Ala Pro Leu Thr Leu Thr Ser Pro Arg Met Val Ala Ala Asp Asn			
65	70	75	80
Gln Asp Thr Ser Asn Leu Pro Gln Leu Ala Val Pro Ala Pro Arg Val			

	85		90		95
Ser His Arg Met Gln Pro Arg Gly Ser Phe Tyr Ser Met Val Pro Asn					
	100		105		110
Ala Thr Ile His Gln Asp Pro Gln Ser Ile Phe Val Thr Asn Pro Val					
	115		120		125
Thr Leu Thr Pro Pro Gln Gly Pro Pro Ala Ala Val Gln Leu Ser Ser					
	130		135		140
Ala Val Asn Ile Met Asn Gly Ser Gln Met His Ile Asn Pro Ala Asn					
145		150		155	160
Lys Ser Leu Pro Pro Thr Phe Gly Pro Ala Thr Leu Phe Asn His Phe					
	165		170		175
Ser Ser Leu Phe Asp Ser Ser Gln Val Pro Ala Asn Gln Gly Trp Gly					
	180		185		190
Asp Gly Pro Leu Ser Ser Arg Val Ala Thr Asp Ala Ser Phe Thr Val					
	195		200		205
Gln Ser Ala Phe Leu Gly Asn Ser Val Leu Gly His Leu Glu Asn Met					
	210		215		220
His Pro Asp Asn Ser Lys Ala Pro Gly Phe Arg Pro Pro Ser Gln Arg					
225		230		235	240
Val Ser Thr Ser Pro Val Gly Leu Pro Ser Ile Asp Pro Ser Gly Ser					
	245		250		255
Ser Pro Ser Ser Ser Ser Ala Pro Leu Ala Ser Phe Ser Gly Ile Pro					
	260		265		270
Gly Thr Arg Val Phe Leu Gln Gly Pro Ala Pro Val Gly Thr Pro Ser					
	275		280		285
Phe Asn Arg Gln His Phe Ser Pro His Pro Trp Thr Ser Ala Ser Asn					
	290		295		300
Ser Cys Asp Ser Pro Ile Pro Ser Val Ser Ser Gly Ser Ser Ser Pro					
305		310		315	320
Leu Ser Ala Thr Ser Ala Pro Pro Thr Leu Gly Gln Pro Lys Gly Val					
	325		330		335
Ser Ala Ser Gln Asp Arg Lys Ile Pro Pro Pro Ile Gly Thr Glu Arg					
	340		345		350
Leu Ala Arg Ile Arg Gln Gly Gly Ser Val Ala Gln Ala Pro Ala Gly					
	355		360		365
Thr Ser Phe Val Ala Pro Val Gly His Ser Gly Ile Trp Ser Phe Gly					

370	375	380	
Val Asn Ala Val Ser Glu Gly Leu Ser Gly Trp Ser Gln Ser Val Met			
385	390	395	400
Gly Asn His Pro Met His Gln Gln Leu Ser Asp Pro Ser Thr Phe Ser			
	405	410	415
Gln His Gln Pro Met Glu Arg Asp Asp Ser Gly Met Val Ala Pro Ser			
	420	425	430
Asn Ile Phe His Gln Pro Met Gly Leu Pro Ile Ser Met Tyr Gly Gly			
	435	440	445
Thr Ile Ile Pro Ser His Pro Gln Leu Ala Asp Val Pro Gly Gly Pro			
	450	455	460
Leu Phe Asn Gly Leu His Asn Pro Asp Pro Ala Trp Asn Pro Met Ile			
465	470	475	480
Lys Val Ile Gln Asn Ser Thr Glu Cys Thr Asp Ala Gln Gln Ala Ser			
	485	490	495
Leu Leu Pro Ser Val Pro Ala Leu Lys Gly Glu Ile Pro Ser Pro Gln			
	500	505	510
Leu Thr Arg Pro Lys Lys Arg Ile Gly Arg Pro Met Val Ala Ser Pro			
	515	520	525
Asn Gln Arg His Gln Asp His Leu Arg Pro Lys Val Pro Ala Gly Val			
	530	535	540
Gln Glu Leu Thr His Cys Pro Asp Thr Pro Leu Leu Pro Pro Ser Asp			
545	550	555	560
Ser Arg Gly His Asn Ser Ser Asn Ser Pro Ser Leu Gln Ala Gly Gly			
	565	570	575
Ala Glu Gly Ala Gly Asp Arg Gly Arg Asp Thr Arg			
	580	585	

<210> 3648

<211> 121

<212> PRT

<213> Homo sapiens

<400> 3648

Met Phe Leu Ser Leu Lys Met Phe Cys Trp Gly Arg His Ala Met Val

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      1             5             10             15
Leu Arg Ile Ala Pro Phe Ser Asp Asp Leu Leu Leu Thr Ser Asp Thr
      20             25             30
Tyr Arg Asp Ser Ala Gly Ala Cys Gln Ser Ser Asn Thr Ser Arg Asn
      35             40             45
Val Arg Ile Trp Asp Arg Arg Ser Gln Asp Ile His Leu Ala Leu Phe
      50             55             60
Trp Glu Glu Glu Ile His Phe Leu Ala Cys Ala Gly Trp Leu Thr Pro
      65             70             75             80
Val Ile Pro Gly Arg Trp Asp Tyr Gly Cys Glu Pro Pro His Pro Ala
      85             90             95
Cys Phe Thr Ser Phe Asn Ser Val Thr Val Asp Asp Val Pro His Arg
      100            105            110
Pro Ala Ser His Ala Thr Cys Glu Ser
      115            120

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<210> 3649

<211> 269

<212> PRT

<213> Homo sapiens

<400> 3649

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Met Val Ala Glu Glu Gly Ser Arg Cys Leu Tyr Pro Gly Gln Leu Phe
      1             5             10             15
Leu Leu Leu His Phe Pro Val Val Gly Gln Cys Trp His Cys Glu Arg
      20             25             30
Cys Glu Gly Tyr Asn Tyr Gln Val Asp Glu Leu Ser Cys Glu Leu Cys
      35             40             45
Pro Leu Asp Gln Arg Pro Asn Met Asn Arg Thr Gly Cys Gln Leu Ile
      50             55             60
Pro Ile Ile Lys Leu Glu Trp His Ser Pro Trp Ala Val Val Pro Val
      65             70             75             80
Phe Val Ala Ile Leu Gly Ile Ile Ala Thr Thr Phe Val Ile Val Thr
      85             90             95
Phe Val Arg Tyr Asn Asp Thr Pro Ile Val Arg Ala Ser Gly Arg Glu

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100	105	110
Leu Ser Tyr Val Leu Leu Thr Gly Ile Phe Leu Cys Tyr Ser Ile Thr		
115	120	125
Phe Leu Met Ile Ala Ala Pro Asp Thr Ile Ile Cys Ser Phe Arg Arg		
130	135	140
Val Phe Leu Gly Leu Gly Met Cys Phe Ser Tyr Ala Ala Leu Leu Thr		
145	150	155
Lys Thr Asn Arg Ile His Arg Ile Phe Glu Gln Gly Lys Lys Ser Val		
165	170	175
Thr Ala Pro Lys Phe Ile Ser Pro Ala Ser Gln Leu Val Ile Thr Phe		
180	185	190
Ser Leu Ile Ser Val Gln Leu Leu Gly Val Phe Val Trp Phe Val Val		
195	200	205
Asp Pro Pro His Ile Ile Ile Asp Tyr Gly Glu Gln Arg Thr Leu Asp		
210	215	220
Pro Glu Lys Ala Arg Gly Val Leu Lys Cys Asp Ile Ser Asp Leu Ser		
225	230	235
Leu Ile Cys Ser Leu Gly Tyr Ser Ile Leu Leu Met Val Thr Cys Thr		
245	250	255
Val Tyr Ala Ile Lys Thr Arg Gly Val Pro Glu Thr Phe		
260	265	

<210> 3650

<211> 540

<212> PRT

<213> Homo sapiens

<400> 3650

Met Arg Ala Leu Asp Asp Met Asp His Glu Gly Arg Asp Thr Leu Ala		
1	5	10
Arg Glu Glu Leu Arg Gln Gly Leu Ser Glu Leu Pro Ala Ile His Asp		
20	25	30
Leu His Gln Gly Ile Leu Glu Glu Leu Glu Glu Arg Leu Ser Asn Trp		
35	40	45
Glu Ser Gln Gln Lys Val Ala Asp Val Phe Leu Ala Arg Glu Gln Gly		

50	55	60
Phe Asp His His Ala Thr His Ile Leu Gln Phe Asp Arg Tyr Leu Gly		
65	70	75
Leu Leu Ser Glu Asn Cys Leu His Ser Pro Arg Leu Ala Ala Ala Val		
	85	90
Arg Glu Phe Glu Gln Ser Val Gln Gly Gly Ser Gln Thr Ala Lys His		95
	100	105
Arg Leu Leu Arg Val Val Gln Arg Leu Phe Gln Tyr Gln Val Leu Leu		110
115	120	125
Thr Asp Tyr Leu Asn Asn Leu Cys Pro Asp Ser Ala Glu Tyr Asp Asn		
130	135	140
Thr Gln Gly Ala Leu Ser Leu Ile Ser Lys Val Thr Asp Arg Ala Asn		
145	150	155
Asp Ser Met Glu Gln Gly Glu Asn Leu Gln Lys Leu Val His Ile Glu		160
	165	170
His Ser Val Arg Gly Gln Gly Asp Leu Leu Gln Pro Gly Arg Glu Phe		175
	180	185
Leu Lys Glu Gly Thr Leu Met Lys Val Thr Gly Lys Asn Arg Arg Pro		190
	195	200
Arg His Leu Phe Leu Met Asn Asp Val Leu Leu Tyr Thr Tyr Pro Gln		205
210	215	220
Lys Asp Gly Lys Tyr Arg Leu Lys Asn Thr Leu Ala Val Ala Asn Met		
225	230	235
Lys Val Ser Arg Pro Val Met Glu Lys Val Pro Tyr Ala Leu Lys Ile		240
	245	250
Glu Thr Ser Glu Ser Cys Leu Met Leu Ser Ala Ser Ser Cys Ala Glu		255
	260	265
Arg Asp Glu Trp Tyr Gly Cys Leu Ser Arg Ala Leu Pro Glu Asp Tyr		270
	275	280
Lys Ala Gln Ala Leu Ala Ala Phe His His Ser Val Glu Ile Arg Glu		285
290	295	300
Arg Leu Gly Val Ser Leu Gly Glu Arg Pro Pro Thr Leu Val Pro Val		
305	310	315
Thr His Val Met Met Cys Met Asn Cys Gly Cys Asp Phe Ser Leu Thr		320
	325	330
		335

Leu Arg Arg His His Cys His Ala Cys Gly Lys Ile Val Cys Arg Asn
 340 345 350
 Cys Ser Arg Asn Lys Tyr Pro Leu Lys Tyr Leu Lys Asp Arg Met Ala
 355 360 365
 Lys Val Cys Asp Gly Cys Phe Gly Glu Leu Lys Lys Arg Gly Arg Ala
 370 375 380
 Val Pro Gly Leu Met Arg Glu Arg Pro Val Ser Met Ser Phe Pro Leu
 385 390 395 400
 Ser Ser Pro Arg Phe Ser Gly Ser Ala Phe Ser Ser Val Phe Gln Ser
 405 410 415
 Ile Asn Pro Ser Thr Phe Lys Lys Gln Lys Lys Val Pro Ser Ala Leu
 420 425 430
 Thr Glu Val Ala Ala Ser Gly Glu Gly Ser Ala Ile Ser Gly Tyr Leu
 435 440 445
 Ser Arg Cys Lys Arg Gly Lys Arg His Trp Lys Lys Leu Trp Phe Val
 450 455 460
 Ile Lys Gly Lys Val Leu Tyr Thr Tyr Met Ala Ser Glu Asp Lys Val
 465 470 475 480
 Ala Leu Glu Ser Met Pro Leu Leu Gly Phe Thr Ile Ala Pro Glu Lys
 485 490 495
 Glu Glu Gly Ser Ser Glu Val Gly Pro Ile Phe His Leu Tyr His Lys
 500 505 510
 Lys Thr Leu Phe Tyr Ser Phe Lys Ala Glu Asp Thr Asn Ser Ala Gln
 515 520 525
 Arg Trp Ile Glu Ala Met Glu Asp Ala Ser Val Leu
 530 535 540

<210> 3651

<211> 244

<212> PRT

<213> Homo sapiens

<400> 3651

Met Pro Arg Gly Phe His Asn Asn Asn Ile Lys Ala Ile Pro Glu Lys
 1 5 10 15

Ala Phe Met Gly Asn Pro Leu Leu Gln Thr Ile His Phe Tyr Asp Asn
 20 25 30
 Pro Ile Gln Phe Val Gly Arg Ser Ala Phe Gln Tyr Leu Pro Lys Leu
 35 40 45
 His Thr Leu Ser Leu Asn Gly Ala Met Asp Ile Gln Glu Phe Pro Asp
 50 55 60
 Leu Lys Gly Thr Thr Ser Leu Glu Ile Leu Thr Leu Thr Arg Ala Gly
 65 70 75 80
 Ile Arg Leu Leu Pro Ser Gly Met Cys Gln Gln Leu Pro Arg Leu Arg
 85 90 95
 Val Leu Glu Leu Ser His Asn Gln Ile Glu Glu Leu Pro Ser Leu His
 100 105 110
 Arg Cys Gln Lys Leu Glu Glu Ile Gly Leu Gln His Asn Arg Ile Trp
 115 120 125
 Glu Ile Gly Ala Asp Thr Phe Ser Gln Leu Ser Ser Cys Asp Ser Thr
 130 135 140
 Gln Ala Leu Val Ala Phe Ser Asp Val Asp Leu Ile Leu Glu Ala Ser
 145 150 155 160
 Glu Ala Gly Arg Pro Pro Gly Leu Glu Thr Tyr Gly Phe Pro Ser Val
 165 170 175
 Thr Leu Ile Ser Cys Gln Gln Pro Gly Ala Pro Arg Leu Glu Gly Ser
 180 185 190
 His Cys Val Glu Pro Glu Gly Asn His Phe Gly Asn Pro Gln Pro Ser
 195 200 205
 Met Asp Gly Glu Leu Leu Leu Arg Ala Glu Gly Ser Thr Pro Ala Gly
 210 215 220
 Gly Gly Leu Ser Gly Gly Gly Gly Phe Gln Pro Ser Gly Leu Ala Phe
 225 230 235 240
 Ala Ser His Val

<210> 3652

<211> 477

<212> PRT

<213> Homo sapiens

<400> 3652

Met Ala His Asn Pro Asn Met Thr His Leu Lys Ile Asn Leu Pro Val
 1 5 10 15
 Thr Ala Leu Pro Pro Leu Trp Val Arg Cys Asp Ser Ser Asp Pro Glu
 20 25 30
 Gly Thr Cys Trp Leu Gly Ala Glu Leu Ile Thr Thr Asn Asn Ser Ile
 35 40 45
 Thr Gly Ile Val Leu Tyr Val Val Ser Cys Lys Ala Asp Lys Asn Tyr
 50 55 60
 Ser Val Asn Leu Glu Asn Leu Lys Asn Leu His Lys Lys Arg His His
 65 70 75 80
 Leu Ser Thr Val Thr Ser Lys Gly Phe Ala Gln Tyr Glu Leu Phe Lys
 85 90 95
 Ser Ser Ala Leu Asp Asp Thr Ile Thr Ala Ser Gln Thr Ala Ile Ala
 100 105 110
 Leu Asp Ile Ser Trp Ser Pro Val Asp Glu Ile Leu Gln Ile Pro Pro
 115 120 125
 Leu Ser Ser Thr Ala Thr Leu Asn Ile Lys Val Glu Ser Gly Glu Pro
 130 135 140
 Arg Gly Pro Leu Asn His Leu Tyr Arg Glu Leu Lys Phe Leu Leu Val
 145 150 155 160
 Leu Ala Asp Gly Leu Arg Thr Gly Val Thr Glu Trp Leu Glu Pro Leu
 165 170 175
 Glu Ala Lys Ser Ala Val Glu Leu Val Gln Glu Phe Leu Asn Asp Leu
 180 185 190
 Asn Lys Leu Asp Gly Phe Gly Asp Ser Thr Lys Lys Asp Thr Glu Val
 195 200 205
 Glu Thr Leu Lys His Asp Thr Ala Ala Val Asp Arg Ser Val Lys Arg
 210 215 220
 Leu Phe Lys Val Arg Ser Asp Leu Asp Phe Ala Glu Gln Leu Trp Cys
 225 230 235 240
 Lys Met Ser Ser Ser Val Ile Ser Tyr Gln Asp Leu Val Lys Cys Phe
 245 250 255
 Thr Leu Ile Ile Gln Ser Leu Gln Arg Gly Asp Ile Gln Pro Trp Leu
 260 265 270

His Ser Gly Ser Asn Ser Leu Leu Ser Lys Leu Ile His Gln Ser Tyr
 275 280 285
 His Gly Thr Met Asp Thr Val Ser Leu Ser Gly Thr Ile Pro Val Gln
 290 295 300
 Met Leu Leu Glu Ile Gly Leu Asp Lys Leu Lys Lys Asp Tyr Ile Ser
 305 310 315 320
 Phe Phe Ile Gly Gln Glu Leu Ala Ser Leu Asn His Leu Glu Tyr Phe
 325 330 335
 Ile Ala Pro Ser Val Asp Ile Gln Glu Gln Val Tyr Arg Val Gln Lys
 340 345 350
 Leu His His Ile Leu Glu Ile Leu Val Ser Cys Met Pro Phe Ile Lys
 355 360 365
 Ser Gln His Glu Leu Leu Phe Ser Leu Thr Gln Ile Cys Ile Lys Tyr
 370 375 380
 Tyr Lys Gln Asn Pro Leu Asp Glu Gln His Ile Phe Gln Leu Pro Val
 385 390 395 400
 Arg Pro Thr Ala Val Lys Asn Leu Tyr Gln Ser Glu Lys Pro Gln Lys
 405 410 415
 Trp Arg Val Glu Ile Tyr Ser Gly Gln Lys Lys Ile Lys Thr Val Trp
 420 425 430
 Gln Leu Ser Asp Ser Ser Pro Ile Asp His Leu Asn Phe His Lys Pro
 435 440 445
 Asp Phe Ser Glu Leu Thr Leu Asn Gly Ser Leu Glu Glu Arg Ile Phe
 450 455 460
 Phe Thr Asn Met Val Thr Cys Ser Gln Val His Phe Lys
 465 470 475

<210> 3653

<211> 486

<212> PRT

<213> Homo sapiens

<400> 3653

Met Leu Gly Glu Gly Ile Lys Glu Arg Gln Arg Arg Ile Lys Glu Phe
 1 5 10 15

Glu Phe Glu Gln Val Lys Lys Arg Arg Tyr Asp Leu Phe Thr Gln Cys
 305 310 315 320
 Phe Glu His Val Ser Ile Ser Ile Asp Gln Ile Tyr Lys Lys Leu Cys
 325 330 335
 Arg Asn Asn Ser Ala Gln Ala Phe Leu Ser Pro Glu Asn Pro Glu Glu
 340 345 350
 Pro Tyr Leu Glu Gly Ile Ser Tyr Asn Cys Val Ala Pro Gly Lys Arg
 355 360 365
 Phe Met Pro Met Asp Asn Leu Ser Gly Gly Glu Lys Cys Val Ala Ala
 370 375 380
 Leu Ala Leu Leu Phe Ala Val His Ser Phe Arg Pro Ala Pro Phe Phe
 385 390 395 400
 Val Leu Asp Glu Val Asp Ala Ala Leu Asp Asn Thr Asn Ile Gly Lys
 405 410 415
 Val Ser Ser Tyr Ile Lys Glu Gln Thr Gln Asp Gln Phe Gln Met Ile
 420 425 430
 Val Ile Ser Leu Lys Glu Glu Phe Tyr Ser Arg Ala Asp Ala Leu Ile
 435 440 445
 Gly Ile Tyr Pro Glu Tyr Asp Asp Cys Met Phe Ser Arg Val Leu Thr
 450 455 460
 Leu Asp Leu Ser Gln Tyr Pro Asp Thr Glu Gly Gln Glu Ser Ser Lys
 465 470 475 480
 Arg His Gly Glu Ser Arg
 485

<210> 3654

<211> 176

<212> PRT

<213> Homo sapiens

<400> 3654

Met Gly Asn His Glu Leu Met Thr Ser Trp Leu Leu Asp Val Arg Lys
 1 5 10 15
 Asn Leu Gln Ser Gln Arg Glu Leu Ser Lys Phe Cys Pro Glu Gln Thr

	20		25		30
Glu Gly Trp Arg Cys His Arg Leu Arg Trp Glu Asn Gly Arg Cys His					
35		40		45	
Arg Leu Gln Gly Lys Val Gly Asp Gln Leu Arg Ala Pro Glu Pro Ser					
50		55		60	
Trp Lys Glu Phe Pro Ile Gln Pro Ala Ser Val Ser Ala Ser Val Leu					
65		70		75	80
Phe Leu Met Thr Leu Arg Val Leu Ala Ser Gly Ser Phe Met Met Gln					
	85		90		95
Arg Val Pro Pro Ser His Pro Gly Arg Leu Arg Ala Pro Ala Ser Ser					
100		105		110	
Trp Gln Pro Gly Ala Arg Leu Arg Ile Trp Arg Pro Thr Thr Gly Trp					
115		120		125	
Ser Leu Ala Ala Thr Ser Gln Arg Arg Val Ser Ser Pro Val Val Ser					
130		135		140	
Cys Gly Arg Val Ala Val Thr Arg Ser Arg Thr Arg Asp Ser Trp Pro					
145		150		155	160
Trp Cys Pro Ser Arg Ser Pro Arg Cys Val Ala Cys Arg Leu Phe Phe					
	165		170		175

<210> 3655

<211> 470

<212> PRT

<213> Homo sapiens

<400> 3655

Met Arg Gly His Lys Gly Ala Lys Gly Glu Ile Gly Glu Pro Gly Arg			
1	5	10	15
Gln Gly His Lys Gly Glu Glu Gly Asp Gln Gly Glu Leu Gly Glu Val			
20	25	30	
Gly Ala Gln Gly Pro Pro Gly Ala Gln Gly Leu Arg Gly Ile Thr Gly			
35	40	45	
Ile Val Gly Asp Lys Gly Glu Lys Gly Ala Arg Gly Leu Asp Gly Glu			
50	55	60	
Pro Gly Pro Gln Gly Leu Pro Gly Ala Pro Gly Asp Gln Gly Gln Arg			

65	70	75	80
Gly Pro Pro Gly Glu Ala Gly Pro Lys Gly Asp Arg Gly Ala Glu Gly			
	85	90	95
Ala Arg Gly Ile Pro Gly Leu Pro Gly Pro Lys Gly Asp Thr Gly Leu			
	100	105	110
Pro Gly Val Asp Gly Arg Asp Gly Ile Pro Gly Met Pro Gly Thr Lys			
	115	120	125
Gly Glu Pro Gly Lys Pro Gly Pro Pro Gly Asp Ala Gly Leu Gln Gly			
	130	135	140
Leu Pro Gly Val Pro Gly Ile Pro Gly Ala Lys Gly Val Ala Gly Glu			
145	150	155	160
Lys Gly Ser Thr Gly Ala Pro Gly Lys Pro Gly Gln Met Gly Asn Ser			
	165	170	175
Gly Lys Pro Gly Gln Gln Gly Pro Pro Gly Glu Val Gly Pro Arg Gly			
	180	185	190
Pro Gln Gly Leu Pro Gly Ser Arg Gly Glu Leu Gly Pro Val Gly Ser			
	195	200	205
Pro Gly Leu Pro Gly Lys Leu Gly Val Val Gly Glu Pro Gly Pro Lys			
	210	215	220
Gly Glu Gln Gly Ala Ser Gly Glu Glu Gly Glu Ala Gly Glu Arg Gly			
225	230	235	240
Glu Leu Gly Asp Ile Gly Leu Pro Gly Pro Lys Gly Ser Ala Gly Asn			
	245	250	255
Pro Gly Glu Pro Gly Leu Arg Gly Pro Glu Gly Ser Arg Gly Leu Pro			
	260	265	270
Gly Val Glu Gly Pro Arg Gly Pro Pro Gly Pro Arg Gly Val Gln Gly			
	275	280	285
Glu Gln Gly Ala Thr Gly Leu Pro Gly Val Gln Gly Pro Pro Gly Arg			
	290	295	300
Ala Pro Thr Asp Gln His Ile Lys Gln Val Cys Met Arg Val Ile Gln			
305	310	315	320
Glu His Phe Ala Glu Met Ala Ala Ser Leu Lys Arg Pro Asp Ser Gly			
	325	330	335
Ala Thr Gly Leu Pro Gly Arg Pro Gly Pro Pro Gly Pro Pro Gly Pro			
	340	345	350
Pro Gly Glu Asn Gly Phe Pro Gly Gln Met Gly Ile Arg Gly Leu Pro			

355 360 365
 Gly Ile Lys Gly Pro Pro Gly Ala Leu Gly Leu Arg Gly Pro Lys Gly
 370 375 380
 Asp Leu Gly Glu Lys Gly Glu Arg Gly Pro Pro Gly Arg Gly Pro Asn
 385 390 395 400
 Gly Leu Pro Gly Ala Ile Gly Leu Pro Gly Asp Pro Gly Pro Ala Ser
 405 410 415
 Tyr Gly Arg Asn Gly Arg Asp Gly Glu Arg Gly Pro Pro Gly Val Ala
 420 425 430
 Gly Ile Pro Gly Val Pro Gly Pro Pro Gly Pro Pro Gly Leu Pro Gly
 435 440 445
 Phe Cys Glu Pro Ala Ser Cys Thr Met Gln Ala Gly Gln Arg Ala Phe
 450 455 460
 Asn Lys Gly Pro Asp Pro
 465 470

<210> 3656

<211> 136

<212> PRT

<213> Homo sapiens

<400> 3656

Met His Glu Pro Leu Cys Pro Ala Ser Cys Cys Phe Tyr Thr Phe Ser
 1 5 10 15
 Ile Ala Ile Thr Val Phe Asp Gly Ser Phe Cys Phe Phe Glu Phe Leu
 20 25 30
 Ile Phe Ile Thr Pro Ala Ser Ser Ala Thr Leu Lys Asp Leu Glu Ser
 35 40 45
 Ser Ser Arg Cys Glu Ala Val Leu Lys Arg Gln Leu Trp Gln Ser Ile
 50 55 60
 Lys Ala Arg Ala Gln Leu Glu Ala His Val Thr Gln Met Leu Glu Gln
 65 70 75 80
 Val Gln Leu Glu Thr Asp Glu Tyr Thr Gln His Leu Lys Gly Glu Arg
 85 90 95
 Ala Arg Trp Gln Gln Arg Val Trp Lys Met Ser Glu Glu Val Cys Thr

100 105 110
 Trp Lys Glu Glu Lys Lys His Asp Arg His Arg Val Gln Glu Leu Glu
 115 120 125
 Arg Ser Leu Ala Glu Leu Lys Asn
 130 135

<210> 3657

<211> 122

<212> PRT

<213> Homo sapiens

<400> 3657

Met Leu Lys Val Ser Ile Trp Ser Ala Phe Gly Pro Met Leu Asn Leu
 1 5 10 15
 Phe Asn Ser Ile Leu Tyr Arg Ser Asn Ile Val Pro Glu Ser Ala Glu
 20 25 30
 Ala Ala Arg Lys Glu Val Ser Ser Arg Thr Lys Leu His Ile Phe Leu
 35 40 45
 Gly Arg Ser Ala Ser Leu Leu Arg Pro Asn Gly His Ser Leu Ala Arg
 50 55 60
 Trp Leu Glu Thr Thr Val Leu Glu Arg Thr Gln Gly Lys Ile Ser Arg
 65 70 75 80
 Arg Asn Pro Asn Arg Lys Ile Tyr Phe Ile His Phe Leu Gln Lys Met
 85 90 95
 His Pro Ile Ile Ala Tyr Ser Pro Pro Thr Trp Thr Ala His Ser Val
 100 105 110
 Asn His Val Leu Gln Val Arg Phe Gly Tyr
 115 120

<210> 3658

<211> 135

<212> PRT

<213> Homo sapiens

<400> 3658

Met Lys Pro His Ala Glu Gln Ile Gln Leu Leu Gly Lys Gln Gly Ala
 1 5 10 15
 Ala Val Ser Gln Leu Cys Pro Leu Val Leu Val Ser Gly His Ile Cys
 20 25 30
 Arg Glu Glu Arg Arg His Phe Gln Arg Ile Ala Leu Thr Ala Ser Ser
 35 40 45
 Leu Ser Cys Gly Ser Gln Leu Lys Trp His Leu Leu Gln Glu Ala Phe
 50 55 60
 Pro Asp Phe Leu Pro Phe Ser Val Leu Pro Val Ser Trp Thr Ala Arg
 65 70 75 80
 Ala Thr Asp Val Leu Ala Leu Ser Val Asp Met Ala Cys Ser Leu Leu
 85 90 95
 Pro His Trp Thr Gly His Ser Ala Arg Ala Lys Thr Val Phe Gly Pro
 100 105 110
 Ser Leu Trp Leu Gln Leu Cys Leu Ala Gln Val Gln Ala Gln Tyr Gly
 115 120 125
 Cys Ser Leu Met Phe Ala Glu
 130 135

<210> 3659

<211> 104

<212> PRT

<213> Homo sapiens

<400> 3659

Met Ser His Arg Ala Trp Leu Ile Leu Ala Phe Phe Phe Ile Phe Tyr
 1 5 10 15
 Tyr Phe Phe Lys Ile Glu Ser Cys Ser Val Ala Gln Ala Gly Val Gln
 20 25 30
 Trp His Ser Leu Ser Ser Val Gln Pro Pro Pro Pro Arg Phe Lys Gln
 35 40 45
 Phe Ser Cys Leu Ser Leu Pro Ser Ser Trp Asp Asn Arg His Met Pro
 50 55 60

Pro Arg Leu Arg Leu Ile Val Gly Gly Arg Ala Cys Ile Ile Val Pro
 65 70 75 80
 Leu His Ser Ser Leu Gly Asn Arg Ala Arg Leu Cys Leu Pro Asn Lys
 85 90 95
 Ala Glu Lys Asp Tyr Leu Arg Glu
 100

<210> 3660

<211> 108

<212> PRT

<213> Homo sapiens

<400> 3660

Met Ser Lys Lys His Gln Asn Asp Cys Thr Cys Asp Arg Ser Cys Lys
 1 5 10 15
 Asn Asn Ala Thr Lys Gly Phe Pro Thr Thr Ser Arg Met Gln Thr Arg
 20 25 30
 Lys Phe Gly Pro Lys Ala Leu Leu Phe Leu Tyr Val Arg Met Pro Asn
 35 40 45
 Ser Leu Ala Gly Lys Arg Pro Ile Met Gln Ile Lys Tyr Thr Ser Asn
 50 55 60
 Phe Ser Pro Glu Lys Gln Leu Trp Leu Gln Val Leu Leu Lys Gln Ala
 65 70 75 80
 Leu Gln Gln Arg Cys Tyr Ser Leu Ala Leu Arg Arg Asn Lys Asn Ser
 85 90 95
 Pro Ser Glu Val Tyr Glu Arg Val Arg Asn Cys Glu
 100 105

<210> 3661

<211> 180

<212> PRT

<213> Homo sapiens

<400> 3661

Met Ser Pro Leu Pro Ser Thr Leu Pro Gln Gly Thr Ser Cys Pro Ala
 1 5 10 15
 Leu Pro Leu Leu Leu Pro Gly Arg Pro Cys Ala Ala Ala Leu Phe Val
 20 25 30
 Arg His Pro Phe Pro Gly Val Pro Leu Ser Phe Pro Leu Thr Leu Leu
 35 40 45
 Ile Ala Leu Leu Ser Ser Pro Leu Tyr Ser Ser Pro His Ser Leu Ser
 50 55 60
 Ser His Pro Gln Pro Asp Leu Thr Ala Cys Lys Ser His Pro Gly Glu
 65 70 75 80
 Met Val Ser Leu Leu Leu Gly Gln Phe Pro Gly Gly Pro Glu Leu Pro
 85 90 95
 Gly Leu Val Asp Ser Gln Gln Arg Pro Gly Arg His Gly Glu Ser Lys
 100 105 110
 Thr Met Ala Ser Glu His Ser Ala Trp Pro Ala Pro Phe Leu Ser Cys
 115 120 125
 Leu Gly Ser Gln Thr Ala Gln Ala Ser Ala Phe Glu Leu Ala Ser Pro
 130 135 140
 Trp Asn Leu Val Cys Asn His Gly Ala Asn Cys Arg Thr Arg Gly Arg
 145 150 155 160
 Glu Gly Arg Gly Val Lys Ser Ile Glu Ser Val Leu Lys Glu Gly Gly
 165 170 175
 Asp Trp Thr Thr
 180

<210> 3662

<211> 198

<212> PRT

<213> Homo sapiens

<400> 3662

Met Arg Ala Pro Ala Gln Val Arg Thr Leu Arg Trp Ser Leu Gly Trp
 1 5 10 15
 Pro Gly Ser Arg Gly Arg Asp Val Phe Ala Ala Leu Arg Cys Ala Gln

20 25 30
 Ala Leu Arg Cys Gln Pro Leu Gly Ser Ala Leu Pro Pro Gln Ala Pro
 35 40 45
 Thr Arg Asp Leu Gly Arg Pro Gln Ala Phe Asp Ser Ser Arg Thr Pro
 50 55 60
 Gly Pro Arg Pro Pro Arg Ser Thr Leu Arg Met Met Glu Thr Lys Ser
 65 70 75 80
 Pro Thr Ser Pro Ser Tyr Gly Ala Arg Gly Lys Val Pro Pro Gly Ala
 85 90 95
 Gly Pro Gly Ser Pro Leu Ser Arg Gly Ala Gly Gln Gly Ala Pro Leu
 100 105 110
 Ser Glu Thr Arg Phe His His Val Ala Gln Ala Phe Leu Lys Leu Leu
 115 120 125
 Ser Ser Ser Asn Pro Pro Thr Ser Ala Ser Glu Ser Ala Arg Ile Ile
 130 135 140
 Gly Val Ser His Cys Thr Gln Pro Gln Val Ala Ser Leu Ser Asp Arg
 145 150 155 160
 His Cys Ser Lys Val Asn His Thr Val Leu Ser Pro Arg Lys Gly Val
 165 170 175
 Pro Leu Gln Leu Thr Ala Ala His Ser Ser Ser Gln Glu Val Leu Ala
 180 185 190
 Thr Val Pro Phe His Gly
 195

<210> 3663

<211> 461

<212> PRT

<213> Homo sapiens

<400> 3663

Met Lys Glu Pro Leu Leu Gly Gly Glu Cys Asp Lys Ala Val Ala Ser
 1 5 10 15
 Gln Leu Gly Leu Leu Asp Glu Ile Lys Thr Glu Pro Asp Asn Ala Gln
 20 25 30
 Glu Tyr Cys His Arg Gln Gln Ser Arg Thr Gln Glu Asn Glu Leu Lys

35	40	45
Ile Asn Ala Val Phe Ser Glu Ser Ala Ser Gln Leu Thr Ala Gly Ile		
50	55	60
Gln Leu Ser Leu Ala Ser Ser Gly Val Asn Lys Met Leu Pro Ser Val		
65	70	75
Ser Thr Thr Ala Ile Gln Val Ser Cys Ala Gly Cys Lys Lys Ile Leu		
85	90	95
Gln Lys Gly Gln Thr Ala Tyr Gln Arg Lys Gly Ser Ala Gln Leu Phe		
100	105	110
Cys Ser Ile Pro Cys Ile Thr Glu Tyr Ile Ser Ser Ala Ser Ser Pro		
115	120	125
Val Pro Ser Lys Arg Thr Cys Ser Asn Cys Ser Lys Asp Ile Leu Asn		
130	135	140
Pro Lys Asp Val Ile Ser Val Gln Leu Glu Asp Thr Thr Ser Cys Lys		
145	150	155
Thr Phe Cys Ser Leu Ser Cys Leu Ser Ser Tyr Glu Glu Lys Arg Lys		
165	170	175
Pro Phe Val Thr Ile Cys Thr Asn Ser Ile Leu Thr Lys Cys Ser Met		
180	185	190
Cys Gln Lys Thr Ala Ile Ile Gln Tyr Glu Val Lys Tyr Gln Asn Val		
195	200	205
Lys His Asn Leu Cys Ser Asn Ala Cys Leu Ser Lys Phe His Ser Ala		
210	215	220
Asn Asn Phe Ile Met Asn Cys Cys Glu Asn Cys Gly Thr Tyr Cys Tyr		
225	230	235
Thr Ser Ser Ser Leu Ser His Ile Leu Gln Met Glu Gly Gln Ser His		
245	250	255
Tyr Phe Asn Ser Ser Lys Ser Ile Thr Ala Tyr Lys Gln Lys Pro Ala		
260	265	270
Lys Pro Leu Ile Ser Val Pro Cys Lys Pro Leu Lys Pro Ser Asp Glu		
275	280	285
Met Ile Glu Thr Thr Ser Asp Leu Gly Lys Thr Glu Leu Phe Cys Ser		
290	295	300
Ile Asn Cys Phe Ser Ala Tyr Ser Lys Ala Lys Met Glu Ser Ser Ser		
305	310	315
Val Ser Val Val Ser Val Val His Asp Thr Ser Thr Glu Leu Leu Ser		

325 330 335
 Pro Lys Lys Asp Thr Thr Pro Val Ile Ser Asn Ile Val Ser Leu Ala
 340 345 350
 Asp Thr Asp Val Ala Leu Pro Ile Met Asn Thr Asp Val Leu Gln Asp
 355 360 365
 Thr Val Ser Ser Val Thr Ala Thr Ala Asp Val Ile Val Asp Leu Ser
 370 375 380
 Lys Ser Ser Pro Ser Glu Pro Ser Asn Ala Val Ala Ser Ser Ser Thr
 385 390 395 400
 Glu Gln Pro Ser Val Ser Pro Ser Ser Ser Val Phe Ser Gln His Ala
 405 410 415
 Ile Gly Ser Ser Thr Glu Val Gln Lys Asp Asn Met Lys Ser Met Lys
 420 425 430
 Ile Ser Asp Glu Leu Cys His Pro Lys Cys Thr Ser Lys Val Gln Lys
 435 440 445
 Val Lys Gly Lys Ser Arg Ser Ile Lys Lys Ser Cys Cys
 450 455 460

<210> 3664

<211> 110

<212> PRT

<213> Homo sapiens

<400> 3664

Met Phe Thr Trp Pro Ile Ser Arg Pro Arg Val Pro Leu Thr Arg Gly
 1 5 10 15
 Phe Phe Phe Phe Leu Phe Leu Phe Phe Phe Phe Leu Gln Gly Gly Ile
 20 25 30
 Met Gly Leu Trp Phe Phe Ser Pro Pro Thr Gly Arg Gly Ser Val Tyr
 35 40 45
 Val Ala Cys Gly Asn Arg Ile Gly Gly Asn Glu Leu Arg Phe Pro Arg
 50 55 60
 Val Gly Lys Arg Glu Val Lys Ser Gly Ala Thr Pro Pro Val Leu Trp
 65 70 75 80
 Arg Asn Ser Pro Asn Thr Glu Lys Lys Gly Ala Val Gly Val Leu Leu

	85	90	95
Cys	Leu	Gln	Val
Val	Arg	Val	Val
Ser	Ala	Thr	Gly
Ala	Arg	His	
100	105	110	

<210> 3665

<211> 259

<212> PRT

<213> Homo sapiens

<400> 3665

Met	Ala	Ser	Pro	Gln	Gly	Gly	Gln	Ile	Ala	Ile	Ala	Met	Arg	Leu	Arg
1				5				10						15	
Asn	Gln	Leu	Gln	Ser	Val	Tyr	Lys	Met	Asp	Pro	Leu	Arg	Asn	Glu	Glu
		20						25					30		
Glu	Val	Arg	Val	Lys	Ile	Lys	Asp	Leu	Asn	Glu	His	Ile	Val	Cys	Cys
		35						40						45	
Leu	Cys	Ala	Gly	Tyr	Phe	Val	Asp	Ala	Thr	Thr	Ile	Thr	Glu	Cys	Leu
	50						55						60		
His	Thr	Phe	Cys	Lys	Ser	Cys	Ile	Val	Lys	Tyr	Leu	Gln	Thr	Ser	Lys
65				70						75				80	
Tyr	Cys	Pro	Met	Cys	Asn	Ile	Lys	Ile	His	Glu	Thr	Gln	Pro	Leu	Leu
				85					90					95	
Asn	Leu	Lys	Leu	Asp	Arg	Val	Met	Gln	Asp	Ile	Val	Tyr	Lys	Leu	Val
		100						105					110		
Pro	Gly	Leu	Gln	Asp	Ser	Glu	Glu	Lys	Arg	Ile	Arg	Glu	Phe	Tyr	Gln
		115						120				125			
Ser	Arg	Gly	Leu	Asp	Arg	Val	Thr	Gln	Pro	Thr	Gly	Glu	Glu	Pro	Ala
	130					135					140				
Leu	Ser	Asn	Leu	Gly	Leu	Pro	Phe	Ser	Ser	Phe	Asp	His	Ser	Lys	Ala
145					150					155				160	
His	Tyr	Tyr	Arg	Tyr	Asp	Glu	Gln	Leu	Asn	Leu	Cys	Leu	Glu	Arg	Leu
			165						170					175	
Ser	Ser	Gly	Lys	Asp	Lys	Asn	Lys	Ser	Val	Leu	Gln	Asn	Lys	Tyr	Val
		180						185						190	

Arg Cys Ser Val Arg Ala Glu Val Arg His Leu Arg Arg Val Leu Cys
 195 200 205
 His Arg Leu Met Leu Asn Pro Gln His Val Gln Leu Leu Phe Asp Asn
 210 215 220
 Glu Val Leu Pro Asp His Met Thr Met Lys Gln Ile Trp Leu Ser Arg
 225 230 235 240
 Trp Phe Gly Lys Pro Ser Pro Leu Leu Leu Gln Tyr Ser Val Lys Glu
 245 250 255
 Lys Arg Arg

<210> 3666

<211> 122

<212> PRT

<213> Homo sapiens

<400> 3666

Met Lys Arg Thr Leu Glu Thr Met Arg Asn Thr Met Gly Glu Glu Thr
 1 5 10 15
 Gly Glu Leu Trp Ser His Lys Pro Gly Phe Arg Ser Gln Phe Cys His
 20 25 30
 Ser Pro Thr Glu Trp Pro Arg Thr Ala Phe Phe Arg Glu Gln Glu Gly
 35 40 45
 Ala Ala Ser Leu Ser Ile Ala Trp Asp His Ile Gln Thr Gly Asp Val
 50 55 60
 Ala Arg Ser Lys Ser Thr Ser Val Gly Ile Leu Val Asp Pro Gly Asp
 65 70 75 80
 Pro Leu Leu Leu Arg Glu Leu Leu Arg Gly Leu Gly Tyr Asp Ser Arg
 85 90 95
 Thr Lys Ser Phe Gly Arg Asp Phe Pro Ser Leu Asp Lys Glu Lys Glu
 100 105 110
 Val Glu Leu Pro Ala Ala Ala Leu Gly Gly
 115 120

<210> 3667

<211> 247

<212> PRT

<213> Homo sapiens

<400> 3667

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Met Leu Cys Val Tyr Phe Phe Lys Gly Ile Glu Asp Asn Asp Glu Leu
  1             5             10             15
Pro Ser Ala Lys Gly Arg Lys Val Leu Arg Ser Leu Val Val Cys Glu
      20             25             30
Asn Gly Leu Pro Ile Lys Glu Gly Leu Ser Cys Asn Gly Pro Arg Pro
      35             40             45
Val Gly Leu Arg Ser Thr Leu Gln Gly Arg Gly Glu Met Val Glu Gln
      50             55             60
Leu Arg Glu Leu Thr Arg Leu Leu Glu Ala Lys Asp Phe Arg Ser Arg
      65             70             75             80
Met Glu Gly Val Gly Gln Leu Leu Glu Leu Cys Lys Ala Lys Thr Glu
      85             90             95
Leu Val Thr Ala His Leu Val Gln Val Phe Asp Ala Phe Thr Pro Arg
      100            105            110
Leu Gln Asp Ser Asn Lys Lys Val Asn Gln Trp Ala Leu Glu Ser Phe
      115            120            125
Ala Lys Met Ile Pro Leu Leu Arg Glu Ser Leu His Pro Met Leu Leu
      130            135            140
Ser Ile Ile Ile Thr Val Ala Asp Asn Leu Asn Ser Lys Asn Ser Gly
      145            150            155            160
Ile Tyr Ala Ala Ala Val Ala Val Leu Asp Ala Met Val Glu Ser Leu
      165            170            175
Asp Asn Leu Cys Leu Leu Pro Ala Leu Ala Gly Arg Val Arg Phe Leu
      180            185            190
Ser Gly Arg Ala Val Leu Asp Val Thr Asp Arg Leu Ala Gly Glu His
      195            200            205
Pro Gln Pro His Pro Thr Pro Ser Pro Gly Arg Phe Leu Phe Ser Pro
      210            215            220
Gly Leu Trp Leu Asn His Ser Pro Ser Tyr Leu Arg Pro Glu Ile Ile

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225 230 235 240
Pro Pro Asn His Leu Lys Phe
 245

<210> 3668
<211> 168
<212> PRT
<213> Homo sapiens

[illegible]

<210> 3669

<211> 185

<212> PRT

<213> Homo sapiens

<400> 3669

```

Met Pro Val Cys Ser Ala Met Gly Arg Ile Leu Trp Met Lys Ala Lys
  1             5             10             15
Gly Ser Ala Asn Ser Ser Gln Leu Gly Ser Lys Thr Gly His Ser Gly
             20             25             30
Gly Gly Arg Asn Ser Pro Ser Gly Pro Gly Pro Pro Arg Gly Ser Ala
             35             40             45
Gly Arg Gly Pro Gly Cys Ser Val Val Ala Ala Ser Ile Thr Ala Gly
             50             55             60
Trp Ala Arg Ala Arg Arg Arg Trp Ala Pro Gly Pro Arg Leu Arg Ala
             65             70             75             80
Pro Leu Gly Pro Arg Pro Val Gln Thr Arg Leu Glu Gln Gln Gln Val
             85             90             95
Arg Val Val Arg Ala Thr Ala Ala Pro Trp Ala Phe Ser Ala Ser Asp
             100            105            110
Asp Asp Val Ser Pro Gln Ala His Ala Val Arg Leu Arg Arg His Gly
             115            120            125
Glu Glu Lys Glu Ser His Pro Thr Pro Ile Asp Pro Pro Ser Ala Arg
             130            135            140
Gly Ser Pro Pro Arg Pro Arg Ile Gly Arg Gly Arg Ala Phe Arg Cys
             145            150            155            160
Gly Trp Ser Leu Ser Leu Gly Phe Gln Leu Ser Gln Leu Leu Leu Thr
             165            170            175
Ile Tyr Tyr Val Ser Glu Phe Leu Pro
             180            185

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<210> 3670

<211> 138

<212> PRT

<213> Homo sapiens

<400> 3670

Met Asn Glu Trp Gln Ser Trp Gly Leu Asn Leu Asp Leu Phe Asp Ser
 1 5 10 15
 Ile Leu Leu Arg Thr Gln Leu His Glu Leu Cys Leu Ile Lys Ile Phe
 20 25 30
 Gly Ala Phe Phe Phe Phe Ala Thr Lys Ser His Ser Val Thr Gln Ala
 35 40 45
 Gly Gly Ala Val Leu Ala His Cys Asn Leu Arg Leu Pro Gly Ser Ser
 50 55 60
 Asn Ser Pro Ala Ser Ala Ser Arg Val Ala Gly Ile Thr Gly Thr His
 65 70 75 80
 His His Ala Trp Leu Ile Phe Val Phe Leu Val Glu Ala Gly Phe His
 85 90 95
 His Val Gly Glu Ala Ser Leu Glu Leu Leu Thr Ser Ser Asp Pro Pro
 100 105 110
 Ala Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Leu Ser His His Thr
 115 120 125
 Trp Pro Phe Ser Val Ile Leu Thr Asn Thr
 130 135

<210> 3671

<211> 186

<212> PRT

<213> Homo sapiens

<400> 3671

Met Met Trp Asp Phe Lys Lys Tyr Tyr Val Ser Asn Phe Ser Lys Gln
 1 5 10 15
 Leu Leu Asp Ser Ile Trp His Gln Pro Ile Phe Asn Leu Leu Ser Ile
 20 25 30
 Gly Gln Ser Leu Tyr Ala Lys Ala Lys Glu Leu Asp Arg Val Lys Glu
 35 40 45
 Ile Gln Glu Gln Leu Phe His Ile Lys Lys Leu Leu Lys Thr Cys Arg
 50 55 60
 Phe Ala Asn Ser Ala Leu Lys Glu Phe Glu Gln Val Pro Gly His Leu

65 70 75 80
 Thr Asp Glu Leu His Leu Phe Ser Leu Glu Asp Leu Val Arg Ile Lys
 85 90 95
 Lys Gly Leu Leu Ala Pro Leu Leu Lys Asp Ile Leu Lys Ala Ser Leu
 100 105 110
 Ala His Val Ala Gly Cys Glu Leu Cys Gln Gly Lys Gly Phe Ile Cys
 115 120 125
 Glu Phe Cys Gln Asn Thr Thr Val Ile Phe Pro Phe Gln Thr Ala Thr
 130 135 140
 Cys Arg Arg Cys Ser Ala Cys Arg Ala Cys Phe His Lys Gln Cys Phe
 145 150 155 160
 Gln Ser Ser Glu Cys Pro Arg Cys Ala Arg Ile Thr Ala Arg Arg Lys
 165 170 175
 Leu Leu Glu Ser Val Ala Ser Ala Ala Thr
 180 185

<210> 3672

<211> 122

<212> PRT

<213> Homo sapiens

<400> 3672

Met Lys Val Ala Leu Leu Arg Phe Phe Ser Pro Pro Asn Met Ser Val
 1 5 10 15
 Thr His Lys Glu Ala His Glu Arg Lys Cys Pro Glu Lys Pro Glu Leu
 20 25 30
 Trp Lys Ala Gly Ser Thr Val Pro Leu Thr Ala Pro Glu Lys Thr Asp
 35 40 45
 Pro Phe Pro Leu Cys Pro Pro Leu Ser Leu Thr Cys Pro Gln Gln Gln
 50 55 60
 Ser Cys Ile Pro Ser Ser Ser Gln Asp Val Leu Asn Ser Leu Trp Val
 65 70 75 80
 Ser Ser His Cys Leu Gln Leu Lys Ile Ser Lys Thr Lys Thr His Cys
 85 90 95
 Leu Pro Thr Gln Asn Val Leu Pro Phe Leu Leu Pro Thr Pro Val Ser

100 105 110
 Ile Val Cys Arg Leu Pro Gly Leu Asp Pro
 115 120

<210> 3673

<211> 122

<212> PRT

<213> Homo sapiens

<400> 3673

Met Pro Val Ile Ala Ala Val Gly His Val Val Leu Trp Trp Met Pro
 1 5 10 15
 Val Ile Ala Thr Val Gly Cys Val Val Leu Trp Trp Met Leu Val Ile
 20 25 30
 Ala Ala Val Gly Arg Val Val Leu Trp Trp Met Pro Val Ile Ala Ala
 35 40 45
 Val Gly Cys Val Val Leu Trp Trp Met Leu Val Ile Ala Thr Val Gly
 50 55 60
 Arg Val Val Leu Trp Trp Met Pro Val Ile Ala Ala Val Gly His Val
 65 70 75 80
 Val Leu Trp Trp Val Leu Ile Gln Phe Arg Thr His Val Ala Leu Gly
 85 90 95
 Cys Leu Gly Pro Gln His Thr Gly Lys Leu Ile Ile Thr Gly Val Ala
 100 105 110
 Cys Ser Leu Ser Thr Ala His Pro Gln Leu
 115 120

<210> 3674

<211> 108

<212> PRT

<213> Homo sapiens

<400> 3674

Met Gly Lys Val Arg Thr Ala Cys Pro Ala Gly Gly Trp Gly Cys Ser

1	5	10	15
Cys His Gln His Trp Ala Leu Ser Leu Gly Leu Arg Leu Ser Asp Arg			
20	25	30	
Thr Gly Ser Gln Gln Thr Asp Arg Trp Met Pro Gln Ala Leu His Leu			
35	40	45	
Val Pro Gly Ala Leu Leu Leu Pro His Pro Val Pro His Leu Glu Leu			
50	55	60	
Cys Ile Pro Glu Ala Val Thr Ala Gly Asp Gly Cys Leu Thr Cys Gln			
65	70	75	80
Pro Met Gly Trp Ala Gly Ile Leu Glu Thr Ser Pro Ile Pro Asp Ile			
85	90	95	
Pro Leu Trp Ala Arg Gly Met Gly Val Asp Ser Gly			
100	105		

<210> 3675

<211> 120

<212> PRT

<213> Homo sapiens

<400> 3675

Met Ala Gly Ala Ala Arg Trp Val Gly Gln Glu Ser Ser Ala Met Val			
1	5	10	15
Cys Phe Gly Cys Pro Gly Gly Ala Ser Ser Arg Cys Arg Ser Pro Arg			
20	25	30	
Gly Arg Gln Ala Ser Arg Val Pro Arg Leu Glu Asn Gly Ala Gln Arg			
35	40	45	
Val Val Arg Thr Met Val His Leu Val Leu Gln Pro Lys Arg Val Thr			
50	55	60	
Leu Val His Pro Pro Arg Gly Leu Glu Pro Val Cys Thr Pro Ile Ala			
65	70	75	80
Arg Met Arg Pro Lys Ser His Gly Leu Arg Ser Ser Leu Pro Leu Ala			
85	90	95	
Met Ile Pro Gln Pro Ala Thr Arg Val Ser Arg Pro Gln Ala Leu Trp			
100	105	110	
Lys Arg Leu Tyr Val Ala Cys Thr			

115

120

<210> 3676

<211> 121

<212> PRT

<213> Homo sapiens

<400> 3676

Met Thr Lys Asp Pro Pro Arg Val Thr Gln Pro Gly Pro Leu Val Arg
 1 5 10 15
 Gly Pro Glu Cys Leu Gln Cys Pro Cys Ile Glu Ala Leu Asn Lys Ala
 20 25 30
 Arg Ser Arg Cys Arg Gly Pro Leu Trp Ile Pro Pro Glu His Leu Pro
 35 40 45
 Arg Ile Met Ala Pro Lys Thr Glu Gly Lys Glu Thr Ala Gln Phe Ala
 50 55 60
 Lys Arg Gln Asp Leu Ser Thr Arg Val Ala Leu Trp Arg Leu Arg Lys
 65 70 75 80
 Met Phe Ala Cys Gln Tyr Leu Leu Ser Phe Pro Pro Val Pro Thr Lys
 85 90 95
 Arg Gly His Lys Ser Ser Ala Trp His Trp Arg Val Ser Glu Gly Pro
 100 105 110
 Glu Ser Cys Val Ser His Gly Val Leu
 115 120

<210> 3677

<211> 290

<212> PRT

<213> Homo sapiens

<400> 3677

Met Arg Lys Pro Arg Pro Arg Lys Val Lys Tyr Leu Ala Gln Gly His
 1 5 10 15
 Thr Ala Ser Lys Glu Gly Ala Gly Leu Asp Ser Asn Ala Ser Leu Pro

20	25	30
Leu Cys Ser Val Cys Gly Gln Pro Ala Pro Phe His Ile Cys Cys Leu		
35	40	45
Pro Gly Phe Leu Pro Glu Ala Pro Ile Ala Leu Arg Gly Val Gln Ala		
50	55	60
Asp Pro Pro Val Leu Leu Leu Gly Pro Gly Glu Leu Glu Lys Pro Gly		
65	70	75
Gly Gln Val Trp Val Gly Ser Pro Leu Pro Ser Ser Arg Ala Cys Pro		
85	90	95
Pro Pro Ala Cys Ser Pro Leu Leu Asn Pro Met Pro Thr Phe Cys Lys		
100	105	110
Leu Trp Leu Arg Lys Ser Ser Ser Ala Trp Leu Cys Thr Glu Val Ser		
115	120	125
Ser Ala Trp Asn His Val Gln Met Arg Cys Ala Cys Ala His Val Glu		
130	135	140
Trp Cys Ser Lys Asn Leu Tyr Ser Ala Ser Trp Lys Arg Ser His Ser		
145	150	155
Arg Arg Pro Ala Gly Ala Ala Arg Ala Trp Glu Arg Arg Pro Gly Arg		
165	170	175
Gly Cys Thr Pro Gly Pro Gly Gly Gly Arg Gly Arg Ala Gly Ala Glu		
180	185	190
Pro Gly Gly Ser Arg Arg Ala Cys Arg His Thr Gly Pro Arg Gln Ala		
195	200	205
Pro Cys Gln Ala Pro Gly Pro Arg Leu Ala Ser Pro Pro Arg Arg Lys		
210	215	220
Gln Thr Gly Leu Trp Leu Pro Pro Ser Glu Pro Thr Pro Ser Leu Phe		
225	230	235
Ser Arg Pro Glu Leu Leu Ile Pro Ser Ile Ser Phe Arg Pro Leu Gly		
245	250	255
Thr Tyr Pro Arg Val Asp Ala Leu Ser His Ala Met Gly Ser Gly Met		
260	265	270
Gly Trp Gly Val Leu Thr Leu Arg Ala Val Val Gly Leu Pro His Val		
275	280	285
Arg Thr		
290		

1

<210> 3678

<211> 117

<212> PRT

<213> Homo sapiens

<400> 3678

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Met Val Gly Pro Ser His Leu Gly Asn Ser Ser Leu Met Gln Ser Val
  1             5             10            15
Thr Gln Gln Trp Cys Leu Gly Ala Ser Ala Cys Ile Gly Ala Gly Leu
      20             25            30
Val Pro Lys Pro Arg Pro Pro Pro Cys Gly Ser Thr Thr Gly Lys Gly
      35             40            45
Asn Asn Gln Thr Ser Ser Ser Val Val Met Arg Ile Gln Glu Asp His
      50             55            60
Val Asn Ile Gly Ile His Asn Gly Gln Thr Leu Trp Arg Met Pro Val
      65             70            75            80
Ile Pro Ala Ile Trp Glu Ala Glu Val Gly Arg Trp Arg Glu Pro Gln
      85             90            95
Asn Leu Lys Pro Ala Trp Ala Thr Trp Gln Asn Gln Ser Leu Leu Lys
      100            105            110
Ile Gln Lys Ile Gly
      115

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<210> 3679

<211> 342

<212> PRT

<213> Homo sapiens

<400> 3679

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Met Leu Pro Leu Glu Pro Cys Arg Arg Pro Asn Phe Glu Leu Ile Pro
  1             5             10            15
Leu Leu Asn Ser Val Asp Ser Asp Asn Cys Gly Ser Met Val Pro Ser
      20             25            30
Phe Ala Asp Ile Leu Tyr Val Ala Asn Asp Glu Glu Ala Ser Tyr Leu

```

35	40	45			
Arg Phe Arg Asn Ser Ile Trp Lys Asn Glu Glu Glu Lys Val Glu Ile					
50	55	60			
Phe His Pro Leu Arg Leu Val Arg Asp Pro Leu Ser Pro Ala Val Arg					
65	70	75	80		
Gln Lys Glu Thr Val Lys Asn Asp Leu Pro Val Asn Glu Ala Ala Ile					
85	90	95			
Arg Lys Ile Ala Ala Leu Glu Asn Glu Leu Thr Phe Leu Arg Ser Gln					
100	105	110			
Ile Ala Ala Ile Val Glu Met Gln Glu Leu Lys Asn Ser Thr Asn Ser					
115	120	125			
Ser Ser Phe Gly Leu Ser Asp Glu Arg Ile Ser Leu Gly Gln Leu Ser					
130	135	140			
Ser Ser Arg Ala Ala His Leu Ser Val Asp Pro Asp Gln Leu Pro Gly					
145	150	155	160		
Ser Val Leu Ser Pro Pro Pro Pro Pro Pro Leu Pro Pro Gln Phe Ser					
165	170	175			
Ser Leu Gln Pro Pro Cys Phe Pro Pro Val Gln Pro Gly Ser Asn Asn					
180	185	190			
Ile Cys Asp Ser Asp Asn Pro Ala Thr Glu Met Ser Lys Gln Asn Pro					
195	200	205			
Ala Ala Asn Lys Thr Asn Tyr Ser His His Ser Lys Ser Gln Arg Asn					
210	215	220			
Lys Asp Ile Pro Asn Met Leu Asp Val Leu Lys Asp Met Asn Lys Val					
225	230	235	240		
Lys Leu Arg Ala Ile Glu Arg Ser Pro Gly Gly Arg Pro Ile His Lys					
245	250	255			
Arg Lys Arg Gln Asn Ser His Trp Asp Pro Val Ser Leu Ile Ser His					
260	265	270			
Ala Leu Lys Gln Lys Phe Ala Phe Gln Glu Asp Asp Ser Phe Glu Lys					
275	280	285			
Glu Asn Arg Ser Trp Glu Ser Ser Pro Phe Ser Ser Pro Glu Thr Ser					
290	295	300			
Arg Phe Gly His His Ile Ser Gln Ser Glu Gly Gln Arg Thr Lys Glu					
305	310	315	320		
Glu Met Val Asn Thr Lys Ala Val Asp Gln Gly Ile Ser Asn Thr Ser					

325
Leu Leu Asn Ser Arg Ile
340

330

335

<210> 3680

<211> 247

<212> PRT

<213> Homo sapiens

<400> 3680

Met Gly Gln Gly Leu Pro Asp Glu Glu Gln Glu Lys Leu Leu Arg Ile
1 5 10 15
Cys Ser Ile Tyr Thr Gln Ser Gly Glu Asn Ser Leu Val Gln Glu Gly
20 25 30
Ser Glu Ala Ser Pro Ile Gly Lys Ser Pro Tyr Thr Leu Asp Ser Leu
35 40 45
Tyr Trp Ser Val Lys Pro Ala Ser Ser Ser Phe Gly Ser Glu Ala Lys
50 55 60
Ala Gln Gln Gln Glu Glu Gln Gly Ser Val Asn Asp Val Lys Glu Glu
65 70 75 80
Glu Lys Glu Glu Lys Glu Val Leu Pro Asp Gln Val Glu Glu Glu Glu
85 90 95
Glu Asn Asp Asp Gln Glu Glu Glu Glu Glu Asp Glu Asp Asp Glu Asp
100 105 110
Asp Glu Glu Glu Asp Arg Met Glu Val Gly Pro Phe Ser Thr Gly Gln
115 120 125
Glu Ser Pro Thr Ala Glu Asn Ala Arg Leu Leu Ala Gln Lys Arg Gly
130 135 140
Ala Leu Gln Gly Ser Ala Trp Gln Val Ser Ser Glu Asp Val Arg Trp
145 150 155 160
Asp Thr Phe Pro Leu Gly Arg Met Pro Gly Gln Thr Glu Asp Pro Ala
165 170 175
Glu Leu Met Leu Glu Asn Tyr Asp Thr Met Tyr Leu Leu Asp Gln Pro
180 185 190
Val Leu Glu Gln Arg Leu Glu Pro Ser Thr Cys Lys Thr Asp Thr Leu

195	200	205
Gly Leu Ser Cys Gly Val Gly Ser Gly Asn Cys Ser Asn Ser Ser Ser		
210	215	220
Ser Asn Phe Glu Gly Leu Leu Trp Ser Gln Gly Gln Leu His Gly Leu		
225	230	235
Lys Thr Gly Leu Gln Leu Phe		240
	245	

<210> 3681

<211> 413

<212> PRT

<213> Homo sapiens

<400> 3681

Met Gly Ser Ser Gln Ser Val Glu Ile Pro Gly Gly Gly Thr Glu Gly		
1	5	10
Tyr His Val Leu Arg Val Gln Glu Asn Ser Pro Gly His Arg Ala Gly		
	20	30
Leu Glu Pro Phe Phe Asp Phe Ile Val Ser Ile Asn Gly Ser Arg Leu		
35	40	45
Asn Lys Asp Asn Asp Thr Leu Lys Asp Leu Leu Lys Ala Asn Val Glu		
50	55	60
Lys Pro Val Lys Met Leu Ile Tyr Ser Ser Lys Thr Leu Glu Leu Arg		
65	70	80
Glu Thr Ser Val Thr Pro Ser Asn Leu Trp Gly Gly Gln Gly Leu Leu		
	85	90
Gly Val Ser Ile Arg Phe Cys Ser Phe Asp Gly Ala Asn Glu Asn Val		
100	105	110
Trp His Val Leu Glu Val Glu Ser Asn Ser Pro Ala Ala Leu Ala Gly		
115	120	125
Leu Arg Pro His Ser Asp Tyr Ile Ile Gly Ala Asp Thr Val Met Asn		
130	135	140
Glu Ser Glu Asp Leu Phe Ser Leu Ile Glu Thr His Glu Ala Lys Pro		
145	150	160
Leu Lys Leu Tyr Val Tyr Asn Thr Asp Thr Asp Asn Cys Arg Glu Val		

165	170	175
Ile Ile Thr Pro Asn Ser Ala Trp Gly Gly Glu Gly Ser Leu Gly Cys		
180	185	190
Gly Ile Gly Tyr Gly Tyr Leu His Arg Ile Pro Thr Arg Pro Phe Glu		
195	200	205
Glu Gly Lys Lys Ile Ser Leu Pro Gly Gln Met Ala Gly Thr Pro Ile		
210	215	220
Thr Pro Leu Lys Asp Gly Phe Thr Glu Val Gln Leu Ser Ser Val Asn		
225	230	235
Pro Pro Ser Leu Ser Pro Pro Gly Thr Thr Gly Ile Glu Gln Ser Leu		
245	250	255
Thr Gly Leu Ser Ile Ser Ser Thr Pro Pro Ala Val Ser Ser Val Leu		
260	265	270
Ser Thr Gly Val Pro Thr Val Pro Leu Leu Pro Pro Gln Val Asn Gln		
275	280	285
Ser Leu Thr Ser Val Pro Pro Met Asn Pro Ala Thr Thr Leu Pro Gly		
290	295	300
Leu Met Pro Leu Pro Ala Gly Leu Pro Asn Leu Pro Asn Leu Asn Leu		
305	310	315
Asn Leu Pro Ala Pro His Ile Met Pro Gly Val Gly Leu Pro Glu Leu		
325	330	335
Val Asn Pro Gly Leu Pro Pro Leu Pro Ser Met Pro Pro Arg Asn Leu		
340	345	350
Pro Gly Ile Ala Pro Leu Pro Leu Pro Ser Glu Phe Leu Pro Ser Phe		
355	360	365
Pro Leu Val Pro Glu Ser Ser Ser Ala Ala Ser Ser Gly Glu Leu Leu		
370	375	380
Ser Ser Leu Pro Pro Thr Ser Asn Ala Pro Ser Asp Pro Ala Thr Thr		
385	390	395
Thr Ala Lys Ala Asp Ala Ala Ser Ser Ser Leu Trp Met		
405	410	

<210> 3682

<211> 425

<212> PRT

<213> Homo sapiens

<400> 3682

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Met Arg Ser Leu Asp Phe Gly Met Arg Thr Gln Val Thr Arg Glu Ala
 1             5             10             15
Ile Ser Arg Leu Cys Glu Ala Val Pro Gly Ala Asn Gly Ala Ile Lys
      20             25             30
Lys Arg Lys Pro Pro Val Lys Phe Leu Ser Thr Val Leu Gly Lys Ser
      35             40             45
Asn Leu Gln Phe Ser Gly Met Asn Ile Lys Leu Thr Ile Ser Thr Cys
      50             55             60
Ser Leu Thr Leu Met Asn Leu Asp Asn Gln Gln Ile Ile Ala Asn His
      65             70             75             80
His Met Gln Ser Ile Ser Phe Ala Ser Gly Gly Asp Pro Asp Thr Thr
      85             90             95
Asp Tyr Val Ala Tyr Val Ala Lys Asp Pro Val Asn Gln Arg Ala Cys
      100            105            110
His Ile Leu Glu Cys His Asn Gly Met Ala Gln Asp Val Ile Ser Thr
      115            120            125
Ile Gly Gln Ala Phe Glu Leu Arg Phe Lys Gln Tyr Leu Lys Asn Pro
      130            135            140
Ser Leu Asn Thr Ser Cys Glu Ser Glu Glu Val His Ile Asp Ser His
      145            150            155            160
Ala Glu Glu Arg Glu Asp His Glu Tyr Tyr Asn Glu Ile Pro Gly Lys
      165            170            175
Gln Pro Pro Val Gly Gly Val Ser Asp Met Arg Ile Lys Val Gln Ala
      180            185            190
Thr Glu Gln Met Ala Tyr Cys Pro Ile Gln Cys Glu Lys Leu Cys Tyr
      195            200            205
Leu Pro Gly Asn Ser Lys Cys Ser Ser Val Tyr Glu Asn Cys Leu Glu
      210            215            220
Gln Ser Arg Ala Ile Gly Asn Val His Pro Arg Gly Val Gln Ser Gln
      225            230            235            240
Arg Asp Thr Ser Leu Leu Lys His Thr Cys Arg Val Asp Leu Phe Asp
      245            250            255

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Asp Pro Cys Tyr Ile Asn Thr Gln Ala Leu Gln Ser Thr Pro Gly Ser
 260 265 270
 Ala Gly Asn Gln Arg Ser Ala Gln Pro Leu Gly Ser Pro Trp His Cys
 275 280 285
 Gly Lys Ala Pro Glu Thr Val Gln Pro Gly Ala Thr Ala Gln Pro Ala
 290 295 300
 Ser Ser His Ser Leu Pro His Ile Lys Gln Gln Leu Trp Ser Glu Glu
 305 310 315 320
 Cys Tyr His Gly Lys Leu Ser Arg Lys Ala Ala Glu Ser Leu Leu Val
 325 330 335
 Lys Asp Gly Asp Phe Leu Val Arg Glu Ser Ala Thr Ser Pro Gly Gln
 340 345 350
 Tyr Val Leu Ser Gly Leu Gln Gly Gly Gln Ala Lys His Leu Leu Leu
 355 360 365
 Val Asp Pro Glu Gly Lys Val Arg Thr Lys Asp His Val Phe Asp Asn
 370 375 380
 Val Gly His Leu Ile Arg Tyr His Met Asp Asn Ser Leu Pro Ile Ile
 385 390 395 400
 Ser Ser Gly Ser Glu Val Ser Leu Lys Gln Pro Val Arg Lys Asp Asn
 405 410 415
 Asn Pro Ala Leu Leu His Ser Asn Lys
 420 425

<210> 3683

<211> 139

<212> PRT

<213> Homo sapiens

<400> 3683

Met Asp Gly Leu Lys Val Gly His Asp Pro Ala Lys Glu Phe Thr Asn
 1 5 10 15
 His Trp Trp Asn Glu Leu Phe Asn Lys Thr Ala Ala Asn Leu Val Val
 20 25 30
 Glu Thr Gly Gln Asp Gly Val Gln Ile Arg Ser Leu Ser Lys Glu Thr
 35 40 45

Thr Arg Tyr Asn His Pro Lys Pro Asn Leu Leu Tyr Gln Lys Phe Val
 50 55 60
 Lys Val Leu Glu Ala Val Gly Asn Arg Val His Pro Phe Ser Leu Pro
 65 70 75 80
 Trp Phe Pro Trp Gly Leu Asn Ser Cys Leu Val Cys Leu Ile Asn Ser
 85 90 95
 Gln Asn Phe Pro Asn Ile Val Gly Ser Cys Asp Gln Pro Cys Cys Cys
 100 105 110
 Leu Leu Arg Leu Pro Arg Pro Ser Ala Gly Ile Glu Ile Phe Arg Phe
 115 120 125
 Arg Gly Ser Cys His Leu Leu Arg Glu Gln Gln
 130 135

<210> 3684

<211> 263

<212> PRT

<213> Homo sapiens

<400> 3684

Met Ala Lys Arg Leu Gln Ala Glu Leu Ser Cys Pro Val Cys Leu Asp
 1 5 10 15
 Phe Phe Ser Cys Ser Ile Ser Leu Ser Cys Thr His Val Phe Cys Phe
 20 25 30
 Asp Cys Ile Gln Arg Tyr Ile Leu Glu Asn His Asp Phe Arg Ala Met
 35 40 45
 Cys Pro Leu Cys Arg Asp Val Val Lys Val Pro Ala Leu Glu Glu Trp
 50 55 60
 Gln Val Ser Val Leu Thr Leu Met Thr Lys Gln His Asn Ser Arg Leu
 65 70 75 80
 Glu Gln Ser Leu His Val Arg Glu Glu Leu Arg His Phe Arg Glu Asp
 85 90 95
 Val Thr Leu Asp Ala Ala Thr Ala Ser Ser Leu Leu Val Phe Ser Asn
 100 105 110
 Asp Leu Arg Ser Ala Gln Cys Lys Lys Ile His His Asp Leu Thr Lys
 115 120 125

Asp Pro Arg Leu Ala Cys Val Leu Gly Thr Pro Cys Phe Ser Ser Gly
 130 135 140
 Gln His Tyr Trp Glu Val Glu Val Gly Glu Val Lys Ser Trp Ser Leu
 145 150 155 160
 Gly Val Cys Lys Glu Pro Ala Asp Arg Lys Ser Asn Asp Leu Phe Pro
 165 170 175
 Gly His Gly Phe Trp Ile Ser Met Lys Ala Gly Ala Ile His Ala Asn
 180 185 190
 Thr His Leu Glu Arg Ile Pro Ala Ser Pro Arg Leu Arg Arg Val Gly
 195 200 205
 Ile Phe Leu Asp Ala Asp Leu Glu Glu Ile Gln Phe Phe Asp Val Asp
 210 215 220
 Asn Asn Val Leu Ile Tyr Thr His Asp Gly Phe Phe Ser Leu Glu Leu
 225 230 235 240
 Leu Cys Pro Phe Phe Cys Leu Glu Leu Leu Gly Glu Gly Glu Ser Gly
 245 250 255
 Asn Val Leu Thr Ile Cys Pro
 260

<210> 3685

<211> 194

<212> PRT

<213> Homo sapiens

<400> 3685

Met Asp Trp Gly Gly Gly Ser Thr Leu Thr Pro Ala Gly Ala Ser Ala
 1 5 10 15
 Gln Glu Pro Arg Leu Ala Gln Pro Ser Leu Gly Arg Pro Ile Pro Arg
 20 25 30
 Val Pro His Pro Val Ser Val Ser Thr Asp Gln Gly Leu Pro Asp Thr
 35 40 45
 Cys Ser Gly Val Ala Met Gly Thr Ser Gly Arg Val Ser Val Ala His
 50 55 60
 Thr Ala Val Cys Arg His Thr Glu Gly Met His Ala Cys Val Cys Ala
 65 70 75 80

His Leu His Val Phe Thr Arg Thr Gly His Arg Arg Arg Cys Ser His
 85 90 95
 Ser Gly Val His Arg Pro Leu Cys Arg Cys Ala His Thr Gln Gln Gly
 100 105 110
 Tyr Val His Arg Arg Val Cys Val Leu Ala Pro Gly Gly Gly Ser Arg
 115 120 125
 Pro Thr Pro His Ile Val Tyr Ser Val Pro Ala Ala Arg Thr Cys Leu
 130 135 140
 Gly Ala Pro Gly Ser Leu Ser Pro Cys His Leu Cys Val His Ile Cys
 145 150 155 160
 Ala His Thr Tyr Ser Gly Thr Pro Val Cys Val His Gly Cys Pro Gly
 165 170 175
 Thr Leu Gly Ser Pro Ser Pro Arg Leu Pro Arg Leu Leu Glu Ser Gly
 180 185 190
 Thr Phe

<210> 3686

<211> 168

<212> PRT

<213> Homo sapiens

<400> 3686

Met Arg Ser Phe Leu Leu Val Trp Lys Leu Phe Arg Arg Lys Asp Met
 1 5 10 15
 Lys His Gln Arg Lys Thr Ala Thr Glu Phe Lys Thr Thr Glu Glu Gly
 20 25 30
 Glu Thr Arg Gln Asp Gly Lys Asp Gly Ser Leu Thr Tyr Arg Ala Asp
 35 40 45
 Thr Cys Ser Pro Cys Pro Glu Ala Gly Gly Pro Pro Ser Ser Ser Ile
 50 55 60
 Ala Ser Gly Ser Ser Ile Ser Val Gly Asn Ser Pro Ser His Ser His
 65 70 75 80
 Ser His Thr Ser Arg Arg Cys Gly Gly Ser Ser Arg Ser Arg Glu Cys
 85 90 95

Cys Ser Ser Leu His Ser Ser Arg Gly Ser Arg Gly Ser Ser Trp Ser
 100 105 110
 Ser Ser Pro Pro Gly Ser Thr Cys Arg Trp Cys Ser Cys His Ser His
 115 120 125
 His His Ser His His Arg Ser His His Arg Ser His His Cys Ser His
 130 135 140
 His His Ser His His His Ser Gly His His Ser His His Asn Phe His
 145 150 155 160
 Asn His Ser Asn Pro Trp Cys Gln
 165

<210> 3687

<211> 188

<212> PRT

<213> Homo sapiens

<400> 3687

Met Leu Val Met Glu Asp Gln His Asn Ser Glu Ile Glu Ser Leu Gln
 1 5 10 15
 Lys Ala Leu Gly Val Ala Arg Glu Asp Asn Arg Lys Leu Ala Met Ser
 20 25 30
 Leu Glu Gln Ala Leu Gln Thr Asn Asn His Leu Gln Thr Lys Leu Asp
 35 40 45
 His Ile Gln Glu Gln Leu Glu Ser Lys Glu Leu Glu Arg Gln Asn Leu
 50 55 60
 Glu Thr Phe Lys Asp Arg Met Thr Glu Glu Ser Lys Val Glu Ala Glu
 65 70 75 80
 Leu His Ala Glu Arg Ile Glu Ala Leu Arg Lys Gln Phe Gln Thr Glu
 85 90 95
 Arg Glu Thr Thr Lys Lys Val Ala Gln Arg Glu Val Ala Glu Leu Lys
 100 105 110
 Lys Ala Leu Asp Glu Ala Asn Phe Arg Ser Val Glu Val Ser Arg Thr
 115 120 125
 Asn Arg Glu Leu Arg Gln Lys Leu Ala Glu Leu Glu Lys Ile Leu Glu

130 135 140
 Ser Asn Lys Glu Lys Ile Lys Asn Gln Lys Thr Gln Ile Lys Leu His
 145 150 155 160
 Leu Ser Ala Lys Ala Asn Asn Ala Gln Asn Ile Glu Arg Met Lys Val
 165 170 175
 Val Trp Glu Thr Ser Ser His Phe Leu Asp Thr Leu
 180 185

<210> 3688

<211> 125

<212> PRT

<213> Homo sapiens

<400> 3688

Met Thr Cys Trp Glu Gly Asn Cys His Val Cys Ser Ser Pro Gly Gly
 1 5 10 15
 Ser Asp Val Phe Leu Ile Ile Leu Gln Val Pro Lys Ala His Pro Cys
 20 25 30
 Leu Trp Gly His Ile Thr Ser His Val Thr Leu Cys Ser Phe Gly Thr
 35 40 45
 Met Ser Leu Trp Thr Val Trp Leu Ile Val Val Val Gln Gly Gln Val
 50 55 60
 Met Cys His Pro Ser Leu Lys Cys Leu His Pro Val Asn Cys Leu Ala
 65 70 75 80
 Tyr Phe Pro Leu Thr Pro Gly Ser Gly Pro Ser Ser Leu Leu Ser Pro
 85 90 95
 Tyr Leu Ser Pro His Ile Gln Ser Pro Pro Lys Ile Leu Pro Val Leu
 100 105 110
 Leu Leu Cys Pro Phe Glu Arg Ala Gln Ser Phe Ile Leu
 115 120 125

<210> 3689

<211> 343

<212> PRT

<213> Homo sapiens

<400> 3689

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Met His His Thr Arg Glu Ser Lys Asp Gly Glu Pro Ser Pro Arg Ser
 1             5             10             15
Ala Ala His Thr Met Pro Arg Arg Lys Lys Gly Tyr Cys Glu Cys Cys
      20             25             30
Gln Glu Ala Phe Glu Glu Leu His Val His Leu Gln Ser Ala Gln His
      35             40             45
Arg Ser Phe Ala Leu Glu Ala His Leu Tyr Ala Glu Val Asp Arg Ile
      50             55             60
Ile Ala Gln Leu Ser His Ser Phe Ala Asp Ile Pro Phe Gln Ala Gly
      65             70             75             80
Leu Pro Arg Trp Ser Gly Ser Pro Ala Ser Asp Cys Asp Pro Leu Cys
      85             90             95
Pro Glu Thr Leu His Pro His Gln Pro Ser His Pro Arg Ala Ala Ser
      100            105            110
Pro Arg Ile Arg Lys Glu Asp Ser Cys Gln Ala Ser Val Thr Gln Gly
      115            120            125
Arg Ala Ala Gly Gln Gln Arg Trp Thr Glu Ser Leu Asp Gly Val Met
      130            135            140
Gly Pro Pro Ala Ser His Thr Cys Val Ser Ala Thr Thr Leu Leu Pro
      145            150            155            160
Ala Leu Pro Lys Gly Ser Arg Glu Gln Gly Cys Leu Cys Pro Cys Pro
      165            170            175
Ala Ser Phe Thr Gln Ser His Leu Val Thr Ser Leu Ala Leu Leu Pro
      180            185            190
Gly Glu Trp Ser Pro Ala Glu Asp Met Pro Leu His Pro Ser Gln Glu
      195            200            205
Asn Ser Phe Ala Pro Ala Asp Ile Pro Val Lys Gly Pro Leu Leu Phe
      210            215            220
Pro Glu Ala Arg Pro Trp Leu Met Ser Ala Arg Cys Trp Val Arg Pro
      225            230            235            240
Phe Pro Phe Val Thr Trp Gly Cys Leu Ile Pro His Asp Thr Thr Pro
      245            250            255
Leu His Glu Glu Val Ser Pro Cys Pro Cys Leu Arg Leu Gly Tyr Leu

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260 265 270
 Tyr Leu Leu Leu Thr Gln Ser Leu Trp Cys Arg Val Arg Val Pro Ser
 275 280 285
 Leu Ser Thr Ala Gly Pro Ile Pro Arg Thr Ser His Pro Cys Thr Leu
 290 295 300
 Ala Phe Pro Ser Tyr Leu Asn Asp His Asp Leu Gly His Leu Cys Gln
 305 310 315 320
 Ala Lys Pro Gln Gly Trp Asn Thr Pro Gln Pro Phe Leu His Cys Gly
 325 330 335
 Phe Leu Ala Val Asp Ser Gly
 340

<210> 3690

<211> 333

<212> PRT

<213> Homo sapiens

<400> 3690

Met Cys Arg Gly Gly Arg Met Phe Ala Pro Thr Lys Thr Trp Arg Arg
 1 5 10 15
 Trp His Arg Arg Val Asn Thr Thr Gln Lys Arg Tyr Ala Ile Cys Ser
 20 25 30
 Ala Leu Ala Ala Ser Ala Leu Pro Ala Leu Val Met Ser Lys Gly His
 35 40 45
 Arg Ile Glu Glu Val Pro Glu Leu Pro Leu Val Val Glu Asp Lys Val
 50 55 60
 Glu Gly Tyr Lys Lys Thr Lys Glu Ala Val Leu Leu Leu Lys Lys Leu
 65 70 75 80
 Lys Ala Trp Asn Asp Ile Lys Lys Val Tyr Ala Ser Gln Arg Met Arg
 85 90 95
 Ala Gly Lys Gly Lys Met Arg Asn Arg Arg Arg Ile Gln Arg Arg Gly
 100 105 110
 Pro Cys Ile Ile Tyr Asn Glu Asp Asn Gly Ile Ile Lys Ala Phe Arg
 115 120 125
 Asn Ile Pro Gly Ile Thr Leu Leu Asn Val Ser Lys Leu Asn Ile Leu

130	135	140	
Lys Leu Ala Pro Gly Gly His Val Gly Arg Phe Cys Ile Trp Thr Glu			
145	150	155	160
Ser Ala Phe Arg Lys Leu Asp Glu Leu Tyr Gly Thr Trp Arg Lys Ala			
	165	170	175
Ala Ser Leu Lys Ser Asn Tyr Asn Leu Pro Met His Lys Met Ile Asn			
	180	185	190
Thr Asp Leu Ser Arg Ile Leu Lys Ser Pro Glu Ile Gln Arg Ala Leu			
	195	200	205
Arg Ala Pro Arg Lys Lys Ile His Arg Arg Val Leu Lys Lys Asn Pro			
210	215	220	
Leu Lys Asn Leu Arg Ile Met Leu Lys Leu Asn Pro Tyr Ala Lys Thr			
225	230	235	240
Met Arg Arg Asn Thr Ile Leu Arg Gln Ala Arg Asn His Lys Leu Arg			
	245	250	255
Val Asp Lys Ala Ala Ala Ala Ala Ala Ala Leu Gln Ala Lys Ser Asp			
	260	265	270
Glu Lys Ala Ala Val Ala Gly Lys Lys Pro Val Val Gly Lys Lys Gly			
	275	280	285
Lys Lys Ala Ala Val Gly Val Lys Lys Gln Lys Lys Pro Leu Val Gly			
290	295	300	
Lys Lys Ala Ala Ala Thr Lys Lys Pro Ala Pro Glu Lys Lys Pro Ala			
305	310	315	320
Glu Lys Lys Pro Thr Thr Glu Glu Lys Lys Pro Ala Ala			
	325	330	

<210> 3691

<211> 364

<212> PRT

<213> Homo sapiens

<400> 3691

Met Pro Thr Leu Val Val Gly Thr Pro Pro Thr Cys Leu Gly Asp Thr
1 5 10 15
Pro Gln Pro Cys His Lys Asn Ser Gln Arg Gln Gly Pro Phe Ser His

20	25	30
Gly Ala Pro Gly Arg Ala Ala Asp Trp Lys Ala Val Ala Lys Pro Arg		
35	40	45
Leu Cys Ala Pro Ala Ala Glu Asp Asp Val Ala Ala Leu Arg Trp Pro		
50	55	60
Gly Pro Ser Gln Gln Pro Asp Pro Pro Trp Ala Ala Pro His Val Val		
65	70	75
Gly Ser Asp Asp Leu Lys Glu Pro Gly Pro Trp Gly Lys Ala Cys Ser		
85	90	95
Leu Pro Met Trp Ser Thr Gly Pro Glu Ala Arg Asp Gly Asp Ser Ser		
100	105	110
Val Ser Ser Gly Arg Leu Ser Cys Ser Ser Gly Gly His Asp Val Cys		
115	120	125
Val Ser Trp Lys Glu Arg Pro Pro Gln Val Leu Gly Pro Gln Gln Arg		
130	135	140
Pro Arg Lys Ser Asp Ala Arg Leu Glu Gln Leu Arg Asp Lys Ile Arg		
145	150	155
Ala Gln Ala Trp Gln Gln Gly Ser Cys Ala Ser Leu Gly Thr Ser Ala		
165	170	175
Pro Ser Ser Ala Ser Arg Leu His Lys Ala Ser Met Leu Thr Leu Arg		
180	185	190
Arg Lys Gly Gln Glu Ala Lys Asn Pro Pro Pro Ala Pro Glu Cys Ser		
195	200	205
Gly Phe Ser Ile Leu Ser Ala Ala Glu Arg Arg Val Glu Ala Lys Ala		
210	215	220
Ser His Gly Gln Gly Arg Glu Leu Ser Arg Val Ser Gln His Gln Val		
225	230	235
Pro Val Leu Arg Glu Lys Pro Lys Arg Val Lys Ser Ser Ser Cys Lys		
245	250	255
Arg Glu Lys Thr Pro Lys Leu Pro Ser Pro Arg Arg Ala Ala Lys Asp		
260	265	270
Lys His Lys Asp Glu Gly Trp Gln Ser Cys Ser His Phe Val Asp Glu		
275	280	285
Ala Thr Glu Val His Arg Val Ser Thr Ala Cys Pro Gly Leu His Arg		
290	295	300

Gly	Arg	Ala	Ser	His	Pro	Ser	Ser	Pro	Arg	Pro	Val	Leu	Leu	Thr	Trp
305					310					315					320
Lys	Pro	Ser	Arg	Val	His	Leu	Gly	Pro	Arg	Leu	Gly	Ser	Leu	Ser	Arg
				325					330					335	
Pro	Pro	Ser	Arg	Arg	Gly	Phe	Trp	Gly	His	Arg	Thr	Thr	Ala	Phe	Trp
			340					345					350		
Arg	His	Gln	Gln	Glu	Pro	Pro	Gly	Gly	Val	Asn	Ala				
	355						360								

<210> 3692

<211> 341

<212> PRT

<213> Homo sapiens

<400> 3692

Met	Trp	Lys	Gly	Phe	Ile	Leu	Thr	Val	Val	Glu	Leu	Arg	Val	Pro	Thr
1				5					10					15	
Asp	Leu	Thr	Leu	Leu	Pro	Gly	His	Leu	Tyr	Met	Met	Ser	Glu	Val	Leu
			20					25					30		
Ala	Lys	Glu	Glu	Ala	Arg	Arg	Ala	Leu	Glu	Thr	Pro	Ser	Cys	Phe	Leu
			35				40					45			
Lys	Val	Ser	Arg	Leu	Glu	Ala	Gln	Leu	Leu	Leu	Glu	Arg	Tyr	Pro	Glu
	50					55					60				
Cys	Gly	Asn	Leu	Leu	Leu	Arg	Pro	Ser	Gly	Asp	Gly	Ala	Asp	Gly	Val
65					70				75					80	
Ser	Val	Thr	Thr	Arg	Gln	Met	His	Asn	Gly	Thr	His	Val	Val	Arg	His
			85					90					95		
Tyr	Lys	Val	Lys	Arg	Glu	Gly	Pro	Lys	Tyr	Val	Ile	Asp	Val	Glu	Gln
		100						105				110			
Pro	Phe	Ser	Cys	Thr	Ser	Leu	Asp	Ala	Val	Val	Asn	Tyr	Phe	Val	Ser
		115					120				125				
His	Thr	Lys	Lys	Ala	Leu	Val	Pro	Phe	Leu	Leu	Asp	Glu	Asp	Tyr	Glu
	130					135				140					
Lys	Val	Leu	Gly	Tyr	Val	Glu	Ala	Asp	Lys	Glu	Asn	Gly	Glu	Asn	Val
145					150				155					160	

Met Trp Leu Val Glu Cys Thr Gly Arg Asp Leu Thr Gly Leu Ser Cys
1 5 10 15
Leu Leu Gly Met Asp Arg Gln Pro Arg Arg Arg Gln His Val Ala Gly
20 25 30

Met Trp Leu Val Glu Cys Thr Gly Arg Asp Leu Thr Gly Leu Ser Cys
1 5 10 15
Leu Leu Gly Met Asp Arg Gln Pro Arg Arg Arg Gln His Val Ala Gly
20 25 30

Cys	Arg	Asp	Val	Pro	Pro	Pro	Leu	Pro	Gln	Gly	Ser	Trp	Gly	Gln	Thr
35				40				45							
Ser	Pro	Arg	His	Ser	Ile	Leu	Cys	Ser	Lys	Ser	Gly	Cys	Asp	Leu	Leu
50				55				60							
Gly	Gly	Gly	Glu	Tyr	Asn	Gly	Glu	Thr	Ser	Gly	Glu	Glu	Phe	Leu	Ala
65				70				75				80			
Pro	Ala	Trp	Thr	Cys	Arg	Ala	Gln	Gln	Ala	Ala	Thr	Trp	Leu	Ser	Val
				85				90				95			
Gln	Gln	Thr	Ser	His	Lys	Ala	Leu	Gly	Pro	Ala	Gly	Gly	Ala	Ala	Met
				100				105				110			
Ser	Ser	Lys	Leu	Ser	Pro	Glu	Glu	Gln	Phe	Leu	Ser	Arg	Ile	His	Phe
115				120				125							
Leu	Arg	Thr	Phe	Met	Cys	Ser	Val	Ala	Gly	Ala	Glu	Leu	Pro	Gly	Ile
130				135				140							
Pro	Gln	Ala	Thr	Glu	Asn	Gly	Glu	Gly	Cys	Arg	Pro	Ala	Arg	Asp	Pro
145				150				155				160			
Ala	Ser	Ser	Pro	Ser	Ser	Leu	Ser	Met	Ala	Ser	Val	Cys	Thr	Gln	Cys
				165				170				175			
Ser	Ser	Ala	Gln	Leu	Val	Ser	Ala	Leu	Ser						
180				185											

<210> 3694

<211> 118

<212> PRT

<213> Homo sapiens

<400> 3694

Met	Lys	Thr	His	Ser	Leu	Thr	Ile	Thr	Arg	Thr	Ala	Ser	Arg	Gly	Gly
1				5				10						15	
Ala	Asn	Pro	Phe	Val	Arg	Ser	Cys	Pro	His	Asp	Pro	Ile	Thr	Ser	His
			20					25					30		
His	Ala	Leu	Pro	Pro	Thr	Leu	Gly	Ile	Ile	Ile	Glu	His	Glu	Met	Trp
		35					40					45			
Met	Gly	Thr	Gln	Ile	Gln	Thr	Ile	Ser	Lys	Cys	Val	Val	Phe	Phe	Phe
	50					55				60					

Leu Gly Leu Phe Ala Phe Leu Asp Arg Val Val Ser Phe Cys Phe Phe
 65 70 75 80
 Arg Leu Glu Cys Ile Gly Ala Ile Val Ala Gln Leu Gln Pro Pro Thr
 85 90 95
 Pro Gly Leu Lys Gln Ser Ser Gly Leu Arg Leu Tyr Phe Leu Cys Asp
 100 105 110
 Trp Gln Asp Met Tyr Leu
 115

<210> 3695

<211> 162

<212> PRT

<213> Homo sapiens

<400> 3695

Met Ala Val Gly Ile Leu Thr Gln Thr Val Gly Pro Trp Pro Arg Leu
 1 5 10 15
 Val Ala Tyr Leu Ser Lys Gln Leu Asp Gly Val Phe Lys Asp Trp Pro
 20 25 30
 Pro Cys Leu Arg Ala Leu Ala Ala Thr Ala Leu Leu Ala Gln Glu Val
 35 40 45
 Asp Lys Leu Thr Leu Gly Gln Asn Leu Asn Ile Lys Ala Ser His Ala
 50 55 60
 Val Val Thr Leu Met Asn Thr Lys Gly His His Trp Leu Met Asn Ala
 65 70 75 80
 Arg Leu Thr Arg Tyr Gln Asn Leu Leu Cys Glu Lys Pro Cys Ile Thr
 85 90 95
 Ile Glu Val Cys Asn Thr Leu Asn Pro Ala Thr Leu Leu Pro Val Pro
 100 105 110
 Glu Ser Pro Val Glu Gln Asn Cys Val Glu Val Leu Asp Thr Val Tyr
 115 120 125
 Ser Ser Arg Leu Asp Leu Gln Asp His Thr Trp Ala Ser Val Asp Trp
 130 135 140
 Glu Leu Tyr Val Asp Arg Ser Ser Phe Val Asn Pro Gln Gly Glu Arg
 145 150 155 160

Cys Ala

<210> 3696

<211> 140

<212> PRT

<213> Homo sapiens

<400> 3696

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Met Gln Gln Asp Pro Glu Leu Pro Ser Val Thr Arg Phe Cys Leu Pro
 1             5             10             15
Leu Cys Ala Arg Cys Tyr Val Gln Pro Gln Trp Val Phe Asp Ser Val
      20             25             30
Asn Ala Arg Leu Leu Leu Pro Val Ala Glu Tyr Phe Ser Gly Val Gln
      35             40             45
Leu Pro Pro His Leu Ser Pro Phe Val Thr Glu Lys Glu Gly Asp Tyr
      50             55             60
Val Pro Pro Glu Lys Leu Lys Leu Leu Ala Leu Gln Arg Gly Glu Asp
      65             70             75             80
Pro Gly Glu Arg Asp Gly Thr Gly Leu Ala Leu Thr Pro Gly Pro Thr
      85             90             95
Leu Ala Val Ser Leu Ser Cys Gln Gly Gly Lys Leu Gln Gly Thr Gly
      100            105            110
Ser Arg Ser Arg Lys Pro Phe Glu Val Thr Cys Arg Ile Arg Leu Arg
      115            120            125
Arg Arg Asp Ile Tyr Leu Leu Gly Ser Gly Val Ile
      130            135            140

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<210> 3697

<211> 128

<212> PRT

<213> Homo sapiens

<400> 3697

Met His Ser Arg His Leu Lys Ile Leu Ser His His Cys Cys Pro Val
 1 5 10 15
 Thr Thr Leu His Val Asn Ala Ser Leu Ser Leu Glu Leu Ser Leu Ser
 20 25 30
 Tyr Ser Gln Leu Pro Pro Pro Asn Thr Phe Arg Ala Gln Val Phe Ser
 35 40 45
 Val Thr Leu Ala Ser Leu Pro Cys Leu Leu Leu Leu Cys Lys Ser Asn
 50 55 60
 Ser Pro Leu Cys Pro Val Leu Phe Ser Ser Leu Leu His Ser Ile Pro
 65 70 75 80
 Arg Leu Pro Gln Asp Arg Val Ala Ser Ala Leu Asn Glu Phe Phe Ser
 85 90 95
 Pro Gly Leu Gln Gly Pro Gln Arg Ser Ser Ser Tyr Tyr Phe Met Asp
 100 105 110
 Cys Met Asn Ser Thr His Leu Val Thr Ser Trp Gln Val Val Trp Arg
 115 120 125

<210> 3698

<211> 201

<212> PRT

<213> Homo sapiens

<400> 3698

Met Gly Asn Val Met Glu Gly Lys Ser Val Glu Glu Leu Ser Ser Thr
 1 5 10 15
 Glu Cys His Gln Trp Tyr Lys Lys Phe Met Thr Glu Cys Pro Ser Gly
 20 25 30
 Gln Leu Thr Leu Tyr Glu Phe Arg Gln Phe Phe Gly Leu Lys Asn Leu
 35 40 45
 Ser Pro Ser Ala Ser Gln Tyr Val Glu Gln Met Phe Glu Thr Phe Asp
 50 55 60
 Phe Asn Lys Asp Gly Tyr Ile Asp Phe Met Glu Tyr Val Ala Ala Leu
 65 70 75 80
 Ser Leu Val Leu Lys Gly Lys Val Glu Gln Lys Leu Arg Trp Tyr Phe
 85 90 95

Lys Leu Tyr Asp Val Asp Gly Asn Gly Cys Ile Asp Arg Asp Glu Leu
 100 105 110
 Leu Thr Ile Ile Gln Ala Ile Arg Ala Ile Asn Pro Cys Ser Asp Thr
 115 120 125
 Thr Met Thr Ala Glu Glu Phe Thr Asp Thr Val Phe Ser Lys Ile Asp
 130 135 140
 Val Asn Gly Asp Gly Glu Leu Ser Leu Glu Glu Phe Ile Glu Gly Val
 145 150 155 160
 Gln Lys Asp Gln Met Leu Leu Asp Thr Leu Thr Arg Ser Leu Asp Leu
 165 170 175
 Thr Arg Ile Val Arg Arg Leu Gln Asn Gly Glu Gln Asp Glu Glu Gly
 180 185 190
 Ala Asp Glu Ala Ala Glu Ala Ala Gly
 195 200

<210> 3699

<211> 1394

<212> PRT

<213> Homo sapiens

<400> 3699

Met Ala Ala Leu Leu Arg Ser Ala Arg Trp Leu Leu Arg Ala Gly Ala
 1 5 10 15
 Ala Pro Arg Leu Pro Leu Ser Leu Arg Leu Leu Pro Gly Gly Pro Gly
 20 25 30
 Arg Leu His Ala Ala Ser Tyr Leu Pro Ala Ala Arg Ala Gly Pro Val
 35 40 45
 Ala Gly Gly Leu Leu Ser Pro Ala Arg Leu Tyr Ala Ile Ala Ala Lys
 50 55 60
 Glu Lys Asp Ile Gln Glu Glu Ser Thr Phe Ser Ser Arg Lys Ile Ser
 65 70 75 80
 Asn Gln Phe Asp Trp Ala Leu Met Arg Leu Asp Leu Ser Val Arg Arg
 85 90 95
 Thr Gly Arg Ile Pro Lys Lys Leu Leu Gln Lys Val Phe Asn Asp Thr
 100 105 110

Cys Arg Ser Gly Gly Leu Gly Gly Ser His Ala Leu Leu Leu Leu Arg
 115 120 125
 Ser Cys Gly Ser Leu Leu Pro Glu Leu Lys Leu Glu Glu Arg Thr Glu
 130 135 140
 Phe Ala His Arg Ile Trp Asp Thr Leu Gln Lys Leu Gly Ala Val Tyr
 145 150 155 160
 Asp Val Ser His Tyr Asn Ala Leu Leu Lys Val Tyr Leu Gln Asn Glu
 165 170 175
 Tyr Lys Phe Ser Pro Thr Asp Phe Leu Ala Lys Met Glu Glu Ala Asn
 180 185 190
 Ile Gln Pro Asn Arg Val Thr Tyr Gln Arg Leu Ile Ala Ser Tyr Cys
 195 200 205
 Asn Val Gly Asp Ile Glu Gly Ala Ser Lys Ile Leu Gly Phe Met Lys
 210 215 220
 Thr Lys Asp Leu Pro Val Thr Glu Ala Val Phe Ser Ala Leu Val Thr
 225 230 235 240
 Gly His Ala Arg Ala Gly Asp Met Glu Asn Ala Glu Asn Ile Leu Thr
 245 250 255
 Val Met Arg Asp Ala Gly Ile Glu Pro Gly Pro Asp Thr Tyr Leu Ala
 260 265 270
 Leu Leu Asn Ala Tyr Ala Glu Lys Gly Asp Ile Asp His Val Lys Gln
 275 280 285
 Thr Leu Glu Lys Val Glu Lys Ser Glu Leu His Leu Met Asp Arg Asp
 290 295 300
 Leu Leu Gln Ile Ile Phe Ser Phe Ser Lys Ala Gly Tyr Pro Gln Tyr
 305 310 315 320
 Val Ser Glu Ile Leu Glu Lys Val Thr Cys Glu Arg Arg Tyr Ile Pro
 325 330 335
 Asp Ala Met Asn Leu Ile Leu Leu Leu Val Thr Glu Lys Leu Glu Asp
 340 345 350
 Val Ala Leu Gln Ile Leu Leu Ala Cys Pro Val Ser Lys Glu Asp Gly
 355 360 365
 Pro Ser Val Phe Gly Ser Phe Phe Leu Gln His Cys Val Thr Met Asn
 370 375 380
 Thr Pro Val Glu Lys Leu Thr Asp Tyr Cys Lys Lys Leu Lys Glu Val
 385 390 395 400

Leu Cys Ser Glu Glu Asn Met Gln Lys Ala Leu Glu Leu Arg Ala Lys
 690 695 700
 Tyr Glu Ser Asp Met Val Thr Gly Gly Tyr Ala Ala Leu Ile Asn Leu
 705 710 715 720
 Cys Cys Arg His Asp Lys Val Glu Asp Ala Leu Asn Leu Lys Glu Glu
 725 730 735
 Phe Asp Arg Leu Asp Ser Ser Ala Val Leu Asp Thr Gly Lys Tyr Val
 740 745 750
 Gly Leu Val Arg Val Leu Ala Lys His Gly Lys Leu Gln Asp Ala Ile
 755 760 765
 Asn Ile Leu Lys Glu Met Lys Glu Lys Asp Val Leu Ile Lys Asp Thr
 770 775 780
 Thr Ala Leu Ser Phe Phe His Met Leu Asn Gly Ala Ala Leu Arg Gly
 785 790 795 800
 Glu Ile Glu Thr Val Lys Gln Leu His Glu Ala Ile Val Thr Leu Gly
 805 810 815
 Leu Ala Glu Pro Ser Thr Asn Ile Ser Phe Pro Leu Val Thr Val His
 820 825 830
 Leu Glu Lys Gly Asp Leu Ser Thr Ala Leu Glu Val Ala Ile Asp Cys
 835 840 845
 Tyr Glu Lys Tyr Lys Val Leu Pro Arg Ile His Asp Val Leu Cys Lys
 850 855 860
 Leu Val Glu Lys Gly Glu Thr Asp Leu Ile Gln Lys Ala Met Asp Phe
 865 870 875 880
 Val Ser Gln Glu Gln Gly Glu Met Val Met Leu Tyr Asp Leu Phe Phe
 885 890 895
 Ala Phe Leu Gln Thr Gly Asn Tyr Lys Glu Ala Lys Lys Ile Ile Glu
 900 905 910
 Thr Pro Gly Ile Arg Ala Arg Ser Ala Arg Leu Gln Trp Phe Cys Asp
 915 920 925
 Arg Cys Val Ala Asn Asn Gln Val Glu Thr Leu Glu Lys Leu Val Glu
 930 935 940
 Leu Thr Gln Lys Leu Phe Glu Cys Asp Arg Asp Gln Met Tyr Tyr Asn
 945 950 955 960
 Leu Leu Lys Leu Tyr Lys Ile Asn Gly Asp Trp Gln Arg Ala Asp Ala
 965 970 975

Val Trp Asn Lys Ile Gln Glu Glu Asn Val Ile Pro Arg Glu Lys Thr			
980	985	990	
Leu Arg Leu Leu Ala Glu Ile Leu Arg Glu Gly Asn Gln Glu Val Pro			
995	1000	1005	
Phe Asp Val Pro Glu Leu Trp Tyr Glu Asp Glu Lys His Ser Leu Asn			
1010	1015	1020	
Ser Ser Ser Ala Ser Thr Thr Glu Pro Asp Phe Gln Lys Asp Ile Leu			
1025	1030	1035	1040
Ile Ala Cys Arg Leu Asn Gln Lys Lys Gly Ala Tyr Asp Ile Phe Leu			
1045	1050	1055	
Asn Ala Lys Glu Gln Asn Ile Val Phe Asn Ala Glu Thr Tyr Ser Asn			
1060	1065	1070	
Leu Ile Lys Leu Leu Met Ser Glu Asp Tyr Phe Thr Gln Ala Met Glu			
1075	1080	1085	
Val Lys Ala Phe Ala Glu Thr His Ile Lys Gly Phe Thr Leu Asn Asp			
1090	1095	1100	
Ala Ala Asn Ser Arg Leu Ile Ile Thr Gln Val Arg Arg Asp Tyr Leu			
1105	1110	1115	1120
Lys Glu Ala Val Thr Thr Leu Lys Thr Val Leu Asp Gln Gln Gln Thr			
1125	1130	1135	
Pro Ser Arg Leu Ala Val Thr Arg Val Ile Gln Ala Leu Ala Met Lys			
1140	1145	1150	
Gly Asp Val Glu Asn Ile Glu Val Val Gln Lys Met Leu Asn Gly Leu			
1155	1160	1165	
Glu Asp Ser Ile Gly Leu Ser Lys Met Val Phe Ile Asn Asn Ile Ala			
1170	1175	1180	
Leu Ala Gln Ile Lys Asn Asn Asp Ile Asp Ala Ala Ile Glu Asn Ile			
1185	1190	1195	1200
Glu Asn Met Leu Thr Ser Glu Asn Lys Val Ile Glu Pro Gln Tyr Phe			
1205	1210	1215	
Gly Leu Ala Tyr Leu Phe Arg Lys Val Ile Glu Glu Gln Leu Glu Pro			
1220	1225	1230	
Ala Val Glu Lys Ile Ser Ile Met Ala Glu Arg Leu Ala Asn Gln Phe			
1235	1240	1245	
Ala Ile Tyr Lys Pro Val Thr Asp Phe Phe Leu Gln Leu Val Asp Ala			
1250	1255	1260	

Gly Lys Val Asp Asp Ala Arg Ala Leu Leu Gln Arg Cys Gly Ala Ile
 1265 1270 1275 1280
 Ala Glu Gln Thr Pro Ile Leu Leu Leu Phe Leu Leu Arg Asn Ser Arg
 1285 1290 1295
 Lys Gln Gly Lys Ala Ser Thr Val Lys Ser Val Leu Glu Leu Ile Pro
 1300 1305 1310
 Glu Leu Asn Glu Lys Glu Glu Ala Tyr Asn Ser Leu Met Lys Ser Tyr
 1315 1320 1325
 Val Ser Glu Lys Asp Val Thr Ser Ala Lys Ala Leu Tyr Glu His Leu
 1330 1335 1340
 Thr Ala Lys Asn Thr Lys Leu Asp Asp Leu Phe Leu Lys Arg Tyr Ala
 1345 1350 1355 1360
 Ser Leu Leu Lys Tyr Ala Gly Glu Pro Val Pro Phe Ile Glu Pro Pro
 1365 1370 1375
 Glu Ser Phe Glu Phe Tyr Ala Gln Gln Leu Arg Lys Leu Arg Glu Asn
 1380 1385 1390
 Ser Ser

<210> 3700

<211> 179

<212> PRT

<213> Homo sapiens

<400> 3700

Met Ile Val Tyr Leu Glu Asn Leu Ile Ile Ser Ala Pro Lys Leu Leu
 1 5 10 15
 Lys Leu Ile Ser Lys Phe Asp Lys Val Ser Gly Tyr Lys Ile Asn Met
 20 25 30
 Gln Lys Ser Gln Ala Phe Leu Tyr Ile Asn Asn Arg Gln Ser Glu Ser
 35 40 45
 Gln Ile Met Ser Glu Leu Pro Phe Thr Ile Ala Thr Lys Arg Ile Lys
 50 55 60
 Tyr Leu Gly Ile Gln Leu Thr Arg Asp Val Lys Asp Leu Phe Glu Glu
 65 70 75 80

Asn Tyr Glu Pro Leu Leu Lys Glu Ile Arg Glu Arg Thr Gln Thr Lys
 85 90 95
 Asn Ile Pro Leu Ser Trp Ile Gly Ile Ile Asn Ile Val Lys Met Ala
 100 105 110
 Thr Leu Pro Lys Val Ile Tyr Arg Ile Asn Ala Ile Pro Ile Glu Leu
 115 120 125
 Pro Leu Thr Phe Phe Thr Glu Leu Glu Lys Asn Asp Phe Lys Phe His
 130 135 140
 Met Glu Pro Lys Asn Ser Ser Tyr Ser Gln Asp Asn Pro Lys Gln Lys
 145 150 155 160
 Arg Ala Lys Leu Glu Ala Ser Cys Tyr Leu Thr Ser Asn Cys Thr Thr
 165 170 175
 Val Leu Gln

<210> 3701

<211> 731

<212> PRT

<213> Homo sapiens

<400> 3701

Met Glu Arg Ser Asp Glu Glu Asn Leu Lys Glu Glu Cys Ser Ser Thr
 1 5 10 15
 Glu Ser Thr Gln Gln Glu His Glu Asp Ala Pro Ser Thr Lys Leu Gln
 20 25 30
 Gly Glu Val Leu Ala Leu Glu Glu Glu Arg Ala Gln Val Leu Gly His
 35 40 45
 Val Glu Gln Leu Lys Val Arg Val Lys Glu Leu Glu Gln Gln Leu Gln
 50 55 60
 Glu Ser Ala Arg Glu Ala Glu Met Glu Arg Ala Leu Leu Gln Gly Glu
 65 70 75 80
 Arg Glu Ala Glu Arg Ala Leu Leu Gln Lys Glu Gln Lys Ala Val Asp
 85 90 95
 Gln Leu Gln Glu Lys Leu Val Ala Leu Glu Thr Gly Ile Gln Lys Glu

100	105	110	
Arg Asp Lys Glu Arg Ala Glu Leu Ala Ala Gly Arg Arg His Leu Glu			
115	120	125	
Ala Arg Gln Ala Leu Tyr Ala Glu Leu Gln Thr Gln Leu Asp Asn Cys			
130	135	140	
Pro Glu Ser Val Arg Glu Gln Leu Gln Glu Gln Leu Arg Arg Glu Ala			
145	150	155	160
Glu Ala Leu Glu Thr Glu Thr Lys Leu Phe Glu Asp Leu Glu Phe Gln			
165	170	175	
Gln Leu Glu Arg Glu Ser Arg Val Glu Glu Glu Arg Glu Leu Ala Gly			
180	185	190	
Gln Gly Leu Leu Arg Ser Lys Ala Glu Leu Leu Arg Ser Ile Ala Lys			
195	200	205	
Arg Lys Glu Arg Leu Ala Ile Leu Asp Ser Gln Ala Gly Gln Ile Arg			
210	215	220	
Ala Gln Ala Val Gln Glu Ser Glu Arg Leu Ala Arg Asp Lys Asn Ala			
225	230	235	240
Ser Leu Gln Leu Leu Gln Lys Glu Lys Glu Lys Leu Thr Val Leu Glu			
245	250	255	
Arg Arg Tyr His Ser Leu Thr Gly Gly Arg Pro Phe Pro Lys Thr Thr			
260	265	270	
Ser Thr Leu Lys Glu Met Glu Lys Leu Leu Leu Pro Ala Val Asp Leu			
275	280	285	
Glu Gln Trp Tyr Gln Glu Leu Met Ala Gly Leu Gly Thr Gly Pro Ala			
290	295	300	
Ala Ala Ser Pro His Ser Ser Pro Pro Pro Leu Pro Ala Lys Ala Ser			
305	310	315	320
Arg Gln Leu Gln Val Tyr Arg Ser Lys Met Asp Gly Glu Ala Thr Ser			
325	330	335	
Pro Leu Pro Arg Thr Arg Ser Gly Pro Leu Pro Ser Ser Ser Gly Ser			
340	345	350	
Ser Ser Ser Ser Ser Gln Leu Ser Val Ala Thr Leu Gly Arg Ser Pro			
355	360	365	
Ser Pro Lys Ser Ala Leu Leu Thr Gln Asn Gly Thr Gly Ser Leu Pro			
370	375	380	
Arg Asn Leu Ala Ala Thr Leu Gln Asp Ile Glu Thr Lys Arg Gln Leu			

385	390	395	400
Ala Leu Gln Gln Lys Gly Gln Gln Val Ile Glu Glu Gln Arg Arg Arg			
405	410	415	
Leu Ala Glu Leu Lys Gln Lys Ala Ala Ala Glu Ala Gln Cys Gln Trp			
420	425	430	
Asp Ala Leu His Gly Ala Ala Pro Phe Pro Ala Gly Pro Ser Gly Phe			
435	440	445	
Pro Pro Leu Met His His Ser Ile Leu His His Leu Pro Ala Gly Arg			
450	455	460	
Glu Arg Gly Glu Glu Gly Glu His Ala Tyr Asp Thr Leu Ser Leu Glu			
465	470	475	480
Ser Ser Asp Ser Met Glu Thr Ser Ile Ser Thr Gly Gly Asn Ser Ala			
485	490	495	
Cys Ser Pro Asp Asn Met Ser Ser Val Ser Gly Leu Asp Met Gly Lys			
500	505	510	
Ile Glu Glu Met Glu Lys Met Leu Lys Glu Ala His Ala Glu Lys Asn			
515	520	525	
Arg Leu Met Glu Ser Arg Glu Arg Glu Met Glu Leu Arg Arg Gln Ala			
530	535	540	
Leu Glu Glu Glu Arg Arg Arg Arg Glu Gln Val Glu Arg Arg Leu Gln			
545	550	555	560
Ser Glu Ser Ala Arg Arg Gln Gln Leu Val Glu Lys Glu Val Lys Met			
565	570	575	
Arg Glu Lys Gln Phe Ser Gln Ala Arg Pro Leu Thr Arg Tyr Leu Pro			
580	585	590	
Ile Arg Lys Glu Asp Phe Asp Leu Lys Thr His Ile Glu Ser Ser Gly			
595	600	605	
His Gly Val Asp Thr Cys Leu His Val Val Leu Ser Ser Lys Val Cys			
610	615	620	
Arg Gly Tyr Leu Val Lys Met Gly Gly Lys Ile Lys Ser Trp Lys Lys			
625	630	635	640
Arg Trp Phe Val Phe Asp Arg Leu Lys Arg Thr Leu Ser Tyr Tyr Val			
645	650	655	
Asp Lys His Glu Thr Lys Leu Lys Gly Val Ile Tyr Phe Gln Ala Ile			
660	665	670	
Glu Glu Val Tyr Tyr Asp His Leu Arg Ser Ala Ala Lys Ser Pro Asn			

675	680	685
Pro Ala Leu Thr Phe Cys Val Lys Thr His Asp Arg Leu Tyr Tyr Met		
690	695	700
Val Ala Pro Ser Ala Glu Ala Met Arg Ile Trp Met Asp Val Ile Val		
705	710	715
Thr Gly Ala Glu Gly Tyr Thr Gln Phe Met Asn		720
	725	730

<210> 3702

<211> 341

<212> PRT

<213> Homo sapiens

<400> 3702

Met Leu Asn Thr Ser Val Pro Asn Asp Met Asp Glu Gln Gln Asn Ala		
1	5	10
Arg Glu Ser Leu Glu Asp Gln Asn Leu Lys Asp Gln Asp His Leu Tyr		
	20	30
Glu Glu Glu Ile Gly Ala Val Gly Gly Ile Asp Tyr Asn Asp Thr Asn		
35	40	45
Gln Asn Ala Gln Ser Glu Gln Asn Gly Ser Ser Asp Leu Leu Cys Asp		
50	55	60
Leu Asn Thr Ser Ser Tyr Asp Thr Ser Ala Leu Cys Asn Gly Phe Pro		
65	70	75
Leu Glu Asn Ile Cys Thr Gln Val Ile Asp Gln Asn Gln Asn Leu His		
	85	90
Gly Asp Ser Lys Gln Ser Asn Leu Thr Asn Gly Asp Tyr Val Ala Ser		
100	105	110
Ser Asp Gly Thr Ser Lys Pro Ser Ser Ser Leu Ala Val Ala Ala Gln		
115	120	125
Leu Arg Glu Ile Ile Pro Ser Ser Ala Leu Pro Asn Gly Thr Val Gln		
130	135	140
His Ile Leu Met Pro Asp Asp Glu Gly Glu Gly Glu Leu Cys Trp Lys		
145	150	155
Lys Val Asp Leu Gly Asp Val Lys Asn Val Asp Val Leu Ser Phe Ser		160

	165		170		175										
His	Ala	Pro	Ser	Phe	Asn	Phe	Leu	Ser	Asn	Ser	Cys	Trp	Ser	Lys	Pro
	180				185								190		
Lys	Glu	Asp	Lys	Ala	Val	Asp	Thr	Ser	Asp	Leu	Glu	Val	Ala	Glu	Asp
	195					200							205		
Pro	Met	Gly	Leu	Gln	Gly	Ile	Asp	Leu	Ile	Thr	Ala	Ala	Leu	Leu	Phe
	210					215							220		
Cys	Leu	Gly	Asp	Ser	Pro	Gly	Gly	Arg	Gly	Ile	Ser	Asp	Ser	Arg	Met
225					230					235					240
Ala	Asp	Ile	Tyr	His	Ile	Asp	Val	Gly	Thr	Gln	Thr	Phe	Ser	Leu	Pro
				245					250					255	
Ser	Ala	Ile	Leu	Ala	Thr	Ser	Thr	Met	Val	Gly	Glu	Ile	Ala	Ser	Ala
			260					265						270	
Ser	Ala	Cys	Asp	His	Ala	Asn	Pro	Gln	Leu	Ser	Asn	Pro	Ser	Pro	Phe
	275					280						285			
Gln	Thr	Leu	Gly	Leu	Asp	Leu	Val	Leu	Glu	Cys	Val	Ala	Arg	Tyr	Gln
	290					295						300			
Pro	Lys	Gln	Arg	Ser	Met	Phe	Thr	Phe	Val	Cys	Gly	Gln	Leu	Phe	Arg
305					310					315					320
Arg	Lys	Glu	Phe	Ser	Ser	His	Phe	Lys	Asn	Val	His	Gly	Asp	Ile	His
				325					330					335	
Ala	Gly	Leu	Asn	Gly											
			340												

<210> 3703

<211> 230

<212> PRT

<213> Homo sapiens

<400> 3703

Met	Phe	Leu	Gln	Cys	Met	Leu	Val	Cys	Met	Leu	Leu	Ser	Ile	Phe	Gln
1				5					10					15	
Ile	Ile	Tyr	Leu	Met	Tyr	Ile	Ile	Arg	Ser	Glu	Ile	Ala	Asp	Gln	Lys
			20					25					30		
Ala	Cys	Ile	Phe	Leu	Lys	Ala	Arg	Asp	Ser	Tyr	Gly	Gln	Leu	Ala	Pro

35	40	45
Arg Lys Val Pro Val Phe Ser Thr Gly Phe Ser Met Ser Arg Gly Ala		
50	55	60
Glu Ile Ile Val Gly Ala Gly Cys Arg Val Trp Arg Val Gln Phe Val		
65	70	75
80		
Leu Ala Val Gly Phe Val Glu Val Val Leu Trp Lys Thr Tyr Arg Gln		
85	90	95
Met Pro Ser Phe Pro Ser Leu Ser Gln Glu Glu Ala Thr Trp Gln Glu		
100	105	110
Gln Glu Ala Pro Arg Arg Asp Thr Pro Thr Glu Ser Ser Cys Ala Val		
115	120	125
Ala Ala Ile Gly Thr Leu Glu Gly Ser Pro Pro Gly Ile Ser Thr Ser		
130	135	140
Phe Phe Arg Lys Val Leu Gly Trp Pro Leu Arg Leu Pro Arg Asp Leu		
145	150	155
160		
Cys Asn Trp Met Gln Gly Leu Leu Gln Ala Ala Gly Leu His Ile Arg		
165	170	175
Asp Asn Ala Tyr Asn Tyr Cys Tyr Met Tyr Glu Leu Leu Ser Leu Gly		
180	185	190
Leu Pro Leu Leu Trp Ala Phe Ser Glu Val Leu Ala Ala Met Tyr Arg		
195	200	205
Glu Ser Glu Gly Ser Leu Glu Ser Ile Cys Asn Trp Val Leu Arg Cys		
210	215	220
Phe Pro Val Lys Leu Arg		
225	230	

<210> 3704

<211> 146

<212> PRT

<213> Homo sapiens

<400> 3704

Met Val Gln Gly Met Cys Ser Pro Ser Pro Phe Gly Thr Ser Arg Ala
1 5 10 15
Cys Thr Val Gly Thr Gln Val Asp Ser Arg Ser Leu Pro Trp Ala Leu

20 25 30
 Gly Ala Ser Ala Gln Arg Gly Asn Ile Pro Thr Ala Thr Cys Ala Arg
 35 40 45
 Thr Ala Gly Thr Leu Arg Arg Gly Leu Gln Pro Gly Trp Gly Trp Glu
 50 55 60
 Asp Phe Leu Asp Glu Gly Gln Pro Gly Phe Ser Ser Arg Met Ser Trp
 65 70 75 80
 Ser Arg Pro Pro Ala Gln Glu Gln Gly Ala Gly Arg Gly Pro Ser Trp
 85 90 95
 Val Arg Gly Leu Gly Gln Pro Thr Ala Ala Phe Glu Gln Gly Pro Arg
 100 105 110
 Ser Ser Val Ser Pro Gln Trp Glu Gly Gly Gly Gln Gly Pro Gly Glu
 115 120 125
 Leu Gly Arg Lys His Leu Leu Gly Pro Ser Gln His His Pro Thr Asp
 130 135 140
 Arg His
 145

<210> 3705

<211> 178

<212> PRT

<213> Homo sapiens

<400> 3705

Met His Ser Met Asp Pro Gln Leu Glu Arg Gln Met Glu Thr Thr Gln
 1 5 10 15
 Asn Leu Val Asp Ser Tyr Met Ala Ile Val Asn Lys Thr Val Trp Asn
 20 25 30
 Leu Met Val Gly Ala Lys Pro Lys Thr Ile Met His Ile Met Ile Tyr
 35 40 45
 Asn Val His Ala Pro Pro His Gly Asp Gln Gly Val His Leu Leu Gly
 50 55 60
 Ala Ala Val Gln Pro Ala Leu Ala Trp Glu Arg Glu Asp Thr His Gly
 65 70 75 80
 Gly Val Gly Arg Ala Gly Thr Ala Ala Arg Arg Asp Ala Ala Ser Gln

	85	90	95
Ser Cys Cys Pro Thr Cys Thr Arg Val Gly Thr Arg Arg His Ser Trp			
	100	105	110
Arg Ser Arg Gln Ser Arg His Ser Gly Ala Thr Arg Leu Ala Trp Glu			
	115	120	125
Glu Ile Asp Thr Pro Gly Gly Val Gly Arg Ala Gly Thr Ala Ala Arg			
	130	135	140
Arg Asp Ser Arg Gly Asn Glu Lys Thr Leu Leu Glu Ala Ser Ala Glu			
145	150	155	160
Gln Ala Asp Gln Gly Val His Leu Leu Gly Ala Ala Val Gln Pro Ala			
	165	170	175
Leu Ala			

<210> 3706

<211> 736

<212> PRT

<213> Homo sapiens

<400> 3706

Met Tyr Arg Glu Met Lys Asp Ser Asp Lys Glu Lys Glu Asn Gly Lys			
1	5	10	15
Met Gly Cys Trp Ser Ile Glu His Val Glu Gln Tyr Leu Gly Thr Asp			
	20	25	30
Glu Leu Pro Lys Asn Asp Leu Ile Thr Tyr Leu Gln Lys Asn Ala Asp			
	35	40	45
Ala Ala Phe Leu Arg His Trp Lys Leu Thr Gly Thr Asn Lys Ser Ile			
	50	55	60
Arg Lys Asn Arg Asn Cys Ser Gln Leu Ile Ala Ala Tyr Lys Asp Phe			
65	70	75	80
Cys Glu His Gly Thr Lys Ser Gly Leu Asn Gln Gly Ala Ile Ser Thr			
	85	90	95
Leu Gln Ser Ser Asp Ile Leu Asn Leu Thr Lys Glu Gln Pro Gln Ala			
	100	105	110
Lys Ala Gly Asn Gly Gln Asn Ser Cys Gly Val Glu Asp Val Leu Gln			

115	120	125
Leu Leu Arg Ile Leu Tyr Ile Val Ala Ser Asp Pro Tyr Ser Arg Ile		
130	135	140
Ser Gln Glu Asp Gly Asp Glu Gln Pro Gln Phe Thr Phe Pro Pro Asp		
145	150	155
Glu Phe Thr Ser Lys Lys Ile Thr Thr Lys Ile Leu Gln Gln Ile Glu		
165	170	175
Glu Pro Leu Ala Leu Ala Ser Gly Ala Leu Pro Asp Trp Cys Glu Gln		
180	185	190
Leu Thr Ser Lys Cys Pro Phe Leu Ile Pro Phe Glu Thr Arg Gln Leu		
195	200	205
Tyr Phe Thr Cys Thr Ala Phe Gly Ala Ser Arg Ala Ile Val Trp Leu		
210	215	220
Gln Asn Arg Arg Glu Ala Thr Val Glu Arg Thr Arg Thr Thr Ser Ser		
225	230	235
Val Arg Arg Asp Asp Pro Gly Glu Phe Arg Val Gly Arg Leu Lys His		
245	250	255
Glu Arg Val Lys Val Pro Arg Gly Glu Ser Leu Met Glu Trp Ala Glu		
260	265	270
Asn Val Met Gln Ile His Ala Asp Arg Lys Ser Val Leu Glu Val Glu		
275	280	285
Phe Leu Gly Glu Glu Gly Thr Gly Leu Gly Pro Thr Leu Glu Phe Tyr		
290	295	300
Ala Leu Val Ala Ala Glu Phe Gln Arg Thr Asp Leu Gly Ala Trp Leu		
305	310	315
Cys Asp Asp Asn Phe Pro Asp Asp Glu Ser Arg His Val Asp Leu Gly		
325	330	335
Gly Gly Leu Lys Pro Pro Gly Tyr Tyr Val Gln Arg Ser Cys Gly Leu		
340	345	350
Phe Thr Ala Pro Phe Pro Gln Asp Ser Asp Glu Leu Glu Arg Ile Thr		
355	360	365
Lys Leu Phe His Phe Leu Gly Ile Phe Leu Ala Lys Cys Ile Gln Asp		
370	375	380
Asn Arg Leu Val Asp Leu Pro Ile Ser Lys Pro Phe Phe Lys Leu Met		
385	390	395
Cys Met Gly Asp Ile Lys Ser Asn Met Ser Lys Leu Ile Tyr Glu Ser		

	405		410		415
Arg Gly Asp Arg Asp Leu His Cys Thr Glu Ser Gln Ser Glu Ala Ser					
	420		425		430
Thr Glu Glu Gly His Asp Ser Leu Ser Val Gly Ser Leu Glu Glu Asp					
	435		440		445
Ser Lys Ser Glu Phe Ile Leu Asp Pro Pro Lys Pro Lys Pro Pro Ala					
	450		455		460
Trp Phe Asn Gly Ile Leu Thr Trp Glu Asp Phe Glu Leu Val Asn Pro					
465		470		475	480
His Arg Ala Arg Phe Leu Lys Glu Ile Lys Asp Leu Ala Ile Lys Arg					
	485		490		495
Arg Gln Ile Leu Ser Asn Lys Gly Leu Ser Glu Asp Glu Lys Asn Thr					
	500		505		510
Lys Leu Gln Glu Leu Val Leu Lys Asn Pro Ser Gly Ser Gly Pro Pro					
	515		520		525
Leu Ser Ile Glu Asp Leu Gly Leu Asn Phe Gln Phe Cys Pro Ser Ser					
	530		535		540
Arg Ile Tyr Gly Phe Thr Ala Val Asp Leu Lys Pro Ser Gly Glu Asp					
545		550		555	560
Glu Met Ile Thr Met Asp Asn Ala Glu Glu Tyr Val Asp Leu Met Phe					
	565		570		575
Asp Phe Cys Met His Thr Gly Ile Gln Lys Gln Met Glu Ala Phe Arg					
	580		585		590
Asp Gly Phe Asn Lys Val Phe Pro Met Glu Lys Leu Ser Ser Phe Ser					
	595		600		605
His Glu Glu Val Gln Met Ile Leu Cys Gly Asn Gln Ser Pro Ser Trp					
	610		615		620
Ala Ala Glu Asp Ile Ile Asn Tyr Thr Glu Pro Lys Leu Gly Tyr Thr					
625		630		635	640
Arg Asp Ser Pro Gly Phe Leu Arg Phe Val Arg Val Leu Cys Gly Met					
	645		650		655
Ser Ser Asp Glu Arg Lys Ala Phe Leu Gln Phe Thr Thr Gly Cys Ser					
	660		665		670
Thr Leu Pro Pro Gly Gly Leu Ala Asn Leu His Pro Arg Leu Thr Val					
	675		680		685
Val Arg Lys Val Asp Ala Thr Asp Ala Ser Tyr Pro Ser Val Asn Thr					

690	695	700	
Cys Val His Tyr Leu Lys Leu Pro Glu Tyr Ser Ser Glu Glu Ile Met			
705	710	715	720
Arg Glu Arg Leu Leu Ala Ala Thr Met Glu Lys Gly Phe His Leu Asn			
725	730	735	

<210> 3707

<211> 203

<212> PRT

<213> Homo sapiens

<400> 3707

Met Pro Leu Leu Ala Phe Pro Gly Pro Ala Pro Ala Cys Trp Arg Pro			
1	5	10	15
Leu Asp Val Gln Pro Leu Pro Gln Gln Trp Ala Leu His Ala His Leu			
20	25	30	
Leu Pro Gly Arg Gly Leu Phe Gly Pro Gly Ser Arg Leu Gly Ala Ala			
35	40	45	
Pro Ala Gly Pro Ala Pro Ala Ser Arg Pro Ser Gly Gly Gln Ala His			
50	55	60	
Ala Ser Gly Gln Pro Leu Pro Ala Trp Arg Leu Leu Leu Cys Met Gly			
65	70	75	80
Ser Arg Pro Trp Thr Ser Ser Ser Arg Pro Leu Gln Ala Gln Leu Phe			
85	90	95	
Leu Pro Ala Ala Ser Ala Gly Pro Asp Cys Arg Gln Val Gly Leu Ser			
100	105	110	
Arg Asp Ser Ser Phe Leu Pro Ala Ala Ser Val Gly Pro Asp Cys His			
115	120	125	
Gln Val Gly Leu Ser Lys Asp Ser Ser Cys Leu Pro Val Ala Ser Val			
130	135	140	
Gly Pro Ser Arg Pro Gln Val Cys Leu Pro Arg Pro Ser Ser Gly Leu			
145	150	155	160
Ser Ala Ala Ser Pro Gly Ala Lys Val Pro Arg Val Arg Leu Ser Arg			
165	170	175	
Leu Ser Ser Ser Cys Leu Pro Val Ala Ser Phe Ser Pro Ala Gln Leu			

180 185 190

Met Pro Pro Gly Gly Leu Pro Arg Pro Cys Phe

195 200

<210> 3708

<211> 177

<212> PRT

<213> Homo sapiens

<400> 3708

Met	Gly	Leu	Gln	Phe	Ser	Gln	Val	Ile	Ser	Ile	Cys	Trp	Ala	Ala	Met
1				5					10					15	
Gly	Ser	Leu	Tyr	Ala	Glu	Met	Thr	Glu	Asn	Lys	Tyr	Val	Cys	Phe	Ser
			20					25					30		
Ala	Leu	Thr	Ile	Leu	Ser	Glu	Trp	Gln	Glu	Trp	Glu	Gly	Ala	Arg	Gly
		35					40					45			
Ser	Gly	Glu	Leu	Trp	Asn	Pro	Glu	Met	Trp	Gln	Gly	Val	Ala	Arg	Glu
	50					55					60				
Gly	Tyr	Trp	Gly	Ser	Trp	Gly	Ala	Leu	Ser	Pro	Ala	Gln	Cys	Ser	Thr
65					70					75					80

[illegible]

<210> 3709

<211> 509

<212> PRT

<213> Homo sapiens

<400> 3709

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Met Glu Leu Lys Lys Ser Pro Asp Gly Gly Trp Gly Trp Val Ile Val
  1             5             10             15
Phe Val Ser Phe Leu Thr Gln Phe Leu Cys Tyr Gly Ser Pro Leu Ala
      20             25             30
Val Gly Val Leu Tyr Ile Glu Trp Leu Asp Ala Phe Gly Glu Gly Lys
      35             40             45
Gly Lys Thr Ala Trp Val Gly Ser Leu Ala Ser Gly Val Gly Leu Leu
      50             55             60
Ala Ser Pro Val Cys Ser Leu Cys Val Ser Ser Phe Gly Ala Arg Pro
      65             70             75             80
Val Thr Ile Phe Ser Gly Phe Met Val Ala Gly Gly Leu Met Leu Ser
      85             90             95
Ser Phe Ala Pro Asn Ile Tyr Phe Leu Phe Phe Ser Tyr Gly Ile Val
      100            105            110
Val Gly Leu Gly Cys Gly Leu Leu Tyr Thr Ala Thr Val Thr Ile Thr
      115            120            125
Cys Gln Tyr Phe Asp Asp Arg Arg Gly Leu Ala Leu Gly Leu Ile Ser
      130            135            140
Thr Gly Ser Ser Val Gly Leu Phe Ile Tyr Ala Ala Leu Gln Arg Met
      145            150            155            160
Leu Val Glu Phe Tyr Gly Leu Asp Gly Cys Leu Leu Ile Val Gly Ala
      165            170            175
Leu Ala Leu Asn Ile Leu Ala Cys Gly Ser Leu Met Arg Pro Leu Gln
      180            185            190
Ser Ser Asp Cys Pro Leu Pro Lys Lys Ile Ala Pro Glu Asp Leu Pro
      195            200            205
Asp Lys Tyr Ser Ile Tyr Asn Glu Lys Gly Lys Asn Leu Glu Glu Asn
      210            215            220

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Ile	Asn	Ile	Leu	Asp	Lys	Ser	Tyr	Ser	Ser	Glu	Glu	Lys	Cys	Arg	Ile
225					230					235					240
Thr	Leu	Ala	Asn	Gly	Asp	Trp	Lys	Gln	Asp	Ser	Leu	Leu	His	Lys	Asn
				245					250					255	
Pro	Thr	Val	Thr	His	Thr	Lys	Glu	Pro	Glu	Thr	Tyr	Lys	Lys	Lys	Val
			260					265					270		

Ala Glu Gln Thr Tyr Phe Cys Lys Gln Leu Ala Lys Arg Lys Trp Gln
275 280 285

Leu Tyr Lys Asn Tyr Cys Gly Glu Thr Val Ala Leu Phe Lys Asn Lys
290 295 300

Val Phe Ser Ala Leu Phe Ile Ala Ile Leu Leu Phe Asp Ile Gly Gly
305 310 315 320

Phe Pro Pro Ser Leu Leu Met Glu Asp Val Ala Arg Ser Ser Asn Val
325 330 335

Lys Glu Glu Glu Phe Ile Met Pro Leu Ile Ser Ile Ile Gly Ile Met
340 345 350

Thr Ala Val Gly Lys Leu Leu Leu Gly Ile Leu Ala Asp Phe Lys Trp
355 360 365

Ile Asn Thr Leu Tyr Leu Tyr Val Ala Thr Leu Ile Ile Met Gly Leu
370 375 380

Ala Leu Cys Ala Ile Pro Phe Ala Lys Ser Tyr Val Thr Leu Ala Leu
385 390 395 400

Leu Ser Gly Ile Leu Gly Phe Leu Thr Gly Asn Trp Ser Ile Phe Pro
405 410 415

Tyr Val Thr Thr Lys Thr Val Gly Ile Glu Lys Leu Ala His Ala Tyr
420 425 430

Gly Ile Leu Met Phe Phe Ala Gly Leu Gly Asn Ser Leu Gly Pro Pro
435 440 445

Ile Val Gly Trp Phe Tyr Asp Trp Thr Gln Thr Tyr Asp Ile Ala Phe
450 455 460

Tyr Phe Ser Gly Phe Cys Val Leu Leu Gly Gly Phe Ile Leu Leu Leu
465 470 475 480

Ala Ala Leu Pro Ser Trp Asp Thr Cys Asn Lys Gln Leu Pro Lys Pro
485 490 495

Ala Pro Thr Thr Phe Leu Tyr Lys Val Ala Ser Asn Val

500

505

<210> 3710

<211> 672

<212> PRT

<213> Homo sapiens

<400> 3710

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Met Val Val Ser Ala Gly Pro Trp Ser Ser Glu Lys Ala Glu Met Asn
  1             5             10             15
Ile Leu Glu Ile Asn Glu Lys Leu Arg Pro Gln Leu Ala Glu Asn Lys
      20             25             30
Gln Gln Phe Arg Asn Leu Lys Glu Lys Cys Phe Val Thr Gln Leu Ala
      35             40             45
Gly Phe Leu Ala Asn Arg Gln Lys Lys Tyr Lys Tyr Glu Glu Cys Lys
      50             55             60
Asp Leu Ile Lys Ser Met Leu Arg Asn Glu Arg Gln Phe Lys Glu Glu
      65             70             75             80
Met Leu Ala Glu Gln Leu Lys Gln Ala Glu Glu Leu Arg Gln Tyr Lys
      85             90             95
Val Leu Val His Ser Gln Glu Arg Glu Leu Thr Gln Leu Arg Glu Lys
      100            105            110
Leu Arg Glu Gly Arg Asp Ala Ser Arg Ser Leu Asn Gln His Leu Gln
      115            120            125
Ala Leu Leu Thr Pro Asp Glu Pro Glu Lys Ser Gln Gly Gln Asp Leu
      130            135            140
Gln Glu Gln Leu Ala Glu Gly Cys Arg Leu Ala Gln His Leu Val Gln
      145            150            155            160
Lys Leu Ser Pro Glu Asn Asp Asn Asp Asp Asp Glu Asp Val Gln Val
      165            170            175
Glu Val Ala Glu Lys Val Gln Lys Ser Ser Ala Pro Arg Glu Met Gln
      180            185            190
Lys Ala Glu Glu Lys Glu Val Pro Glu Asp Ser Leu Glu Glu Cys Ala
      195            200            205
Ile Thr Cys Ser Asn Ser His Gly Pro Tyr Asp Ser Asn Gln Pro His

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210	215	220
Arg Lys Thr Lys Ile Thr Phe Glu Glu Asp Lys Val Asp Ser Thr Leu		
225	230	235
Ile Gly Ser Ser Pro His Val Glu Trp Glu Asp Ala Val His Ile Ile		
245	250	255
Pro Glu Asn Glu Ser Asp Asp Glu Glu Glu Glu Glu Lys Gly Pro Val		
260	265	270
Ser Pro Arg Asn Leu Gln Glu Ser Glu Glu Glu Glu Val Pro Gln Glu		
275	280	285
Ser Trp Asp Glu Gly Tyr Ser Thr Leu Ser Ile Pro Pro Glu Met Leu		
290	295	300
Ala Ser Tyr Lys Ser Tyr Ser Ser Thr Phe His Ser Leu Glu Glu Gln		
305	310	315
Gln Val Cys Met Ala Val Asp Ile Gly Arg Tyr Arg Trp Asp Gln Val		
325	330	335
Lys Lys Glu Asp Gln Glu Ala Thr Gly Pro Arg Leu Ser Arg Glu Leu		
340	345	350
Leu Asp Glu Lys Glu Pro Glu Val Leu Gln Asp Ser Leu Asp Arg Cys		
355	360	365
Tyr Ser Thr Pro Ser Gly Cys Leu Glu Leu Thr Asp Ser Cys Gln Pro		
370	375	380
Tyr Arg Ser Ala Phe Tyr Val Leu Glu Gln Gln Arg Val Gly Leu Ala		
385	390	395
Val Asp Met Asp Glu Ile Glu Lys Tyr Gln Glu Val Glu Glu Asp Gln		
405	410	415
Asp Pro Ser Cys Pro Arg Leu Ser Arg Glu Leu Leu Asp Glu Lys Glu		
420	425	430
Pro Glu Val Leu Gln Asp Ser Leu Asp Arg Cys His Ser Thr Pro Ser		
435	440	445
Gly Tyr Leu Glu Leu Pro Asp Leu Gly Gln Pro Tyr Ser Ser Ala Val		
450	455	460
Tyr Ser Leu Glu Glu Gln Tyr Leu Gly Leu Ala Leu Asp Met Asp Arg		
465	470	475
Ile Lys Lys Asp Gln Glu Glu Glu Glu Asp Gln Gly Pro Pro Cys Pro		
485	490	495
Arg Leu Ser Arg Glu Leu Leu Glu Val Val Glu Pro Glu Val Leu Gln		

500	505	510
Asp Ser Leu Asp Arg Cys Tyr Ser Thr Pro Ser Ser Cys Leu Glu Gln		
515	520	525
Pro Asp Ser Cys Gln Pro Tyr Gly Ser Ser Phe Tyr Ala Leu Glu Glu		
530	535	540
Lys His Val Gly Phe Ser Leu Asp Val Gly Glu Ile Glu Lys Lys Gly		
545	550	555
Lys Gly Lys Lys Arg Arg Gly Arg Arg Ser Lys Lys Lys Arg Arg Arg		
565	570	575
Arg Gly Arg Lys Glu Gly Glu Glu Asp Gln Asn Pro Pro Cys Pro Arg		
580	585	590
Leu Asn Gly Val Leu Met Glu Val Glu Glu Pro Glu Val Leu Gln Asp		
595	600	605
Ser Leu Asp Arg Cys Tyr Ser Thr Pro Leu Met Tyr Phe Glu Leu Pro		
610	615	620
Asp Ser Phe Gln His Tyr Arg Ser Val Phe Tyr Ser Phe Glu Glu Gln		
625	630	635
His Ile Ser Phe Ala Leu Tyr Val Asp Asn Arg Phe Phe Thr Leu Thr		
645	650	655
Val Thr Ser Leu His Leu Val Phe Gln Met Gly Val Ile Phe Pro Gln		
660	665	670

<210> 3711

<211> 222

<212> PRT

<213> Homo sapiens

<400> 3711

Met Leu Asn Ser Leu Met Lys Arg Asp Leu Glu Lys His Leu Asn Val
1 5 10 15
Ser Lys Lys Phe His Gln Val Ser Ile Leu Leu Gly Ile Glu Leu Leu
20 25 30
Tyr Gln Val Asn Phe Ser Arg Glu Ala Leu Gln Glu Arg Arg Ala Arg
35 40 45
Cys Glu Thr Gln Asn Ile Asp Pro Val Val Trp Thr Asn Gln Arg Val

50	55	60
Leu Lys Trp Val Arg Asp Ile Asp Leu Lys Glu Tyr Ala Asp Asn Leu		
65	70	75
Thr Asn Ser Gly Val His Gly Ala Val Leu Val Leu Glu Pro Thr Phe		
85	90	95
Asn Ala Glu Ala Met Ala Thr Ala Leu Gly Ile Pro Ser Gly Lys His		
100	105	110
Ile Leu Arg Arg His Leu Ala Glu Glu Met Ser Ala Val Phe His Pro		
115	120	125
Ala Asn Ser Thr Gly Ile Arg Glu Ala Glu Arg Phe Gly Thr Pro Pro		
130	135	140
Gly Arg Ala Ser Ser Val Thr Arg Thr Gly Lys Glu Glu Asn Ser Ser		
145	150	155
Gly Leu Lys Tyr Lys Ala Gly Arg Leu Pro Leu Gly Lys Ile Gly Arg		
165	170	175
Gly Phe Ser Ser Lys Asp Pro Asp Phe His Asp Asp Tyr Gly Ser Leu		
180	185	190
Gln Asn Glu Asp Cys Gly Asp Asp Asp Pro Gln Ser Arg Leu Glu Gln		
195	200	205
Cys Arg Leu Glu Gly Tyr Asn Ser Leu Glu Val Thr Asn Val		
210	215	220

<210> 3712

<211> 575

<212> PRT

<213> Homo sapiens

<400> 3712

Met Tyr Ala Gly Asn Ile Pro Ile Tyr Lys Thr Glu Ser Arg Ser Arg		
1	5	10
Asn Glu Gln Gly Met Asp Pro Ile Thr Arg Gln Val Gly Gln His Ile		
20	25	30
Glu Met Glu Pro Glu Trp Glu Ala Ala Phe Thr Leu Gln Met Lys Leu		
35	40	45

Thr His Val Ile Ser Met Met Gln Asp Trp Cys Ala Ser Asp Glu Lys
 50 55 60
 Val Leu Ile Glu Ala Tyr Lys Lys Cys Leu Ala Val Leu Met Gln Cys
 65 70 75 80
 His Gly Gly Tyr Thr Asp Gly Glu Gln Pro Ile Thr Leu Ser Ile Cys
 85 90 95
 Gly His Ser Val Glu Thr Ile Arg Tyr Cys Val Ser Gln Glu Lys Val
 100 105 110
 Ser Ile His Leu Pro Val Ser Arg Leu Leu Ala Gly Leu His Val Leu
 115 120 125
 Leu Ser Lys Ser Glu Val Ala Tyr Lys Phe Pro Glu Leu Leu Pro Leu
 130 135 140
 Ser Glu Leu Ser Pro Pro Met Leu Ile Glu His Pro Leu Arg Cys Leu
 145 150 155 160
 Val Leu Cys Ala Gln Val His Ala Gly Met Trp Arg Arg Asn Gly Phe
 165 170 175
 Ser Leu Val Asn Gln Ile Tyr Tyr Tyr His Asn Val Lys Cys Arg Arg
 180 185 190
 Glu Met Phe Asp Lys Asp Val Val Met Leu Gln Thr Gly Val Ser Met
 195 200 205
 Met Asp Pro Asn His Phe Leu Met Ile Met Leu Ser Arg Phe Glu Leu
 210 215 220
 Tyr Gln Ile Phe Ser Thr Pro Asp Tyr Gly Lys Arg Phe Ser Ser Glu
 225 230 235 240
 Ile Thr His Lys Asp Val Val Gln Gln Asn Asn Thr Leu Ile Glu Glu
 245 250 255
 Met Leu Tyr Leu Ile Ile Met Leu Val Gly Glu Arg Phe Ser Pro Gly
 260 265 270
 Val Gly Gln Val Asn Ala Thr Asp Glu Ile Lys Arg Glu Ile Ile His
 275 280 285
 Gln Leu Ser Ile Lys Pro Met Ala His Ser Glu Leu Val Lys Ser Leu
 290 295 300
 Pro Glu Asp Glu Asn Lys Glu Thr Gly Met Glu Ser Val Ile Glu Ala
 305 310 315 320
 Val Ala His Phe Lys Lys Pro Gly Leu Thr Gly Arg Gly Met Tyr Glu
 325 330 335

Leu Lys Pro Glu Cys Ala Lys Glu Phe Asn Leu Tyr Phe Tyr His Phe
 340 345 350
 Ser Arg Ala Glu Gln Ser Lys Ala Glu Glu Ala Gln Arg Lys Leu Arg
 355 360 365
 Arg Gln Asn Arg Glu Asp Thr Ala Leu Pro Pro Pro Val Leu Pro Pro
 370 375 380
 Phe Cys Pro Leu Phe Ala Ser Leu Val Asn Ile Leu Gln Ser Asp Val
 385 390 395 400
 Met Leu Cys Ile Met Gly Thr Ile Leu Gln Trp Ala Val Glu His Asn
 405 410 415
 Gly Tyr Ala Trp Ser Glu Ser Met Leu Gln Arg Val Leu His Leu Ile
 420 425 430
 Gly Met Ala Leu Gln Glu Glu Lys Gln His Leu Glu Asn Val Thr Glu
 435 440 445
 Glu His Val Val Thr Phe Thr Phe Thr Gln Lys Ile Ser Lys Pro Gly
 450 455 460
 Glu Ala Pro Lys Asn Ser Pro Ser Ile Leu Ala Met Leu Glu Thr Leu
 465 470 475 480
 Gln Asn Ala Pro Tyr Leu Glu Val His Lys Asp Met Ile Arg Trp Ile
 485 490 495
 Leu Lys Thr Phe Asn Ala Val Lys Lys Met Arg Glu Ser Ser Pro Thr
 500 505 510
 Ser Pro Val Ala Glu Thr Glu Gly Thr Ile Met Glu Glu His Asn Phe
 515 520 525
 Arg Val Gln Gly Thr Lys Thr Lys Leu Arg Gly Arg Glu Lys Gln Arg
 530 535 540
 Leu Pro Asp Cys Ala Glu Lys Arg Ser Trp Leu Arg Cys Leu Lys Cys
 545 550 555 560
 Ser Gly Ile Leu Leu Met Lys Thr Lys Asn Ser Phe Ser Arg His
 565 570 575

<210> 3713

<211> 617

<212> PRT

<213> Homo sapiens

<400> 3713

Met Gly Glu Thr Leu Lys Asp Pro Val Ile Lys Arg Cys Cys Glu Ala
 1 5 10 15
 Pro Asn Arg Leu Ser Asp Leu Gln Asn Val Ser Glu Gly Leu Glu Lys
 20 25 30
 Cys Gln Lys Ser Leu Asn Asp Tyr Leu Asp Ser Lys Arg Asn Ala Phe
 35 40 45
 Pro Arg Phe Phe Phe Ile Ser Asp Asp Glu Leu Leu Ser Ile Leu Gly
 50 55 60
 Ser Ser Asp Pro Leu Cys Val Gln Glu His Met Ile Lys Met Tyr Asp
 65 70 75 80
 Asn Ile Ala Ser Leu Arg Phe Asn Asp Gly Asp Ser Gly Glu Lys Leu
 85 90 95
 Val Ser Ala Met Ile Ser Ala Glu Gly Glu Val Met Glu Phe Arg Lys
 100 105 110
 Ile Val Arg Ala Glu Gly Arg Val Glu Asp Trp Met Thr Ala Val Leu
 115 120 125
 Asn Glu Met Arg Arg Thr Asn Arg Leu Ile Thr Lys Glu Ala Ile Phe
 130 135 140
 Arg Tyr Cys Glu Asp Arg Ser Arg Val Asp Trp Met Leu Leu Tyr Gln
 145 150 155 160
 Gly Met Val Val Leu Ala Ala Ser Gln Val Trp Trp Thr Trp Glu Val
 165 170 175
 Glu Asp Val Phe His Lys Ala Gln Lys Gly Glu Lys Gln Ala Met Lys
 180 185 190
 Asn Tyr Gly Arg Lys Met His Arg Gln Ile Asp Glu Leu Val Thr Arg
 195 200 205
 Ile Thr Met Pro Leu Ser Lys Asn Asp Arg Lys Lys Tyr Asn Thr Val
 210 215 220
 Leu Ile Ile Asp Val His Ala Arg Asp Ile Val Asp Ser Phe Ile Arg
 225 230 235 240
 Gly Ser Ile Leu Glu Ala Arg Glu Phe Asp Trp Glu Ser Gln Leu Arg
 245 250 255
 Phe Tyr Trp Asp Arg Glu Pro Asp Glu Leu Asn Ile Arg Gln Cys Thr

260	265	270
Gly Thr Phe Gly Tyr Gly Tyr Glu Tyr Met Gly Leu Asn Gly Arg Leu		
275	280	285
Val Ile Thr Pro Leu Thr Asp Arg Ile Tyr Leu Thr Leu Thr Gln Ala		
290	295	300
Leu Ser Met Tyr Leu Gly Gly Ala Pro Ala Gly Pro Ala Gly Thr Gly		
305	310	315
Lys Thr Glu Thr Thr Lys Asp Leu Ala Lys Ala Leu Gly Leu Leu Cys		
325	330	335
Val Val Thr Asn Cys Gly Glu Gly Met Asp Tyr Arg Ala Val Gly Lys		
340	345	350
Ile Phe Ser Gly Leu Ala Gln Cys Gly Ala Trp Gly Cys Phe Asp Glu		
355	360	365
Phe Asn Arg Ile Asp Ala Ser Val Leu Ser Val Ile Ser Ser Gln Ile		
370	375	380
Gln Thr Ile Arg Asn Ala Leu Ile His Gln Leu Thr Thr Phe Gln Phe		
385	390	395
Glu Gly Gln Glu Ile Ser Leu Asp Ser Arg Met Gly Ile Phe Ile Thr		
405	410	415
Met Asn Pro Gly Tyr Ala Gly Arg Thr Glu Leu Pro Glu Ser Val Lys		
420	425	430
Ala Leu Phe Arg Pro Val Val Val Ile Val Pro Asp Leu Gln Gln Ile		
435	440	445
Cys Glu Ile Met Leu Phe Ser Glu Gly Phe Leu Glu Ala Lys Thr Leu		
450	455	460
Ala Lys Lys Met Thr Val Leu Tyr Lys Leu Ala Arg Glu Gln Leu Ser		
465	470	475
Lys Gln Tyr His Tyr Asp Phe Gly Leu Arg Ala Leu Lys Ser Val Leu		
485	490	495
Val Met Ala Gly Glu Leu Lys Arg Gly Ser Ser Asp Leu Arg Glu Asp		
500	505	510
Val Val Leu Met Arg Ala Leu Arg Asp Met Asn Leu Pro Lys Phe Val		
515	520	525
Leu Glu Asp Val Pro Leu Phe Leu Gly Leu Ile Ser Asp Leu Phe Pro		
530	535	540

Gly Leu Asp Cys Pro Arg Val Arg Tyr Pro Asp Phe Asn Asp Ala Val
 545 550 555 560
 Glu Gln Val Leu Glu Glu Asn Gly Tyr Ala Val Leu Pro Ile Gln Val
 565 570 575
 Asp Lys Val Val Gln Met Phe Glu Thr Met Leu Thr Arg His Thr Thr
 580 585 590
 Met Val Val Gly Pro Thr Arg Gly Gly Lys Ser Val Val Ile Asn Thr
 595 600 605
 Leu Cys Gln Ala Gln Thr Asn Leu Ser
 610 615

<210> 3714

<211> 180

<212> PRT

<213> Homo sapiens

<400> 3714

Met Gln Phe Ser Lys Pro Arg Lys Leu Val Asn Thr Ile Asn Pro Gly
 1 5 10 15
 Ala Arg Phe Met Thr Thr Ala Met Tyr Asp Ala Arg Glu Ala Ile Ile
 20 25 30
 Pro Gly Ser Val Tyr Asp Arg Ser Ser Gln Gly Arg Pro Ser Ser Met
 35 40 45
 Tyr Phe Gln Thr His Asp Gln Ile Gly Met Ile Ser Ala Gly Pro Ser
 50 55 60
 His Val Ala Ala Met Asn Ile Pro Ile Pro Phe Asn Leu Val Met Pro
 65 70 75 80
 Pro Met Pro Pro Pro Gly Tyr Phe Gly Gln Ala Asn Gly Pro Ala Ala
 85 90 95
 Gly Glu His Leu Trp Leu Arg Leu Gly Val Ala Leu Leu Arg Ala Leu
 100 105 110
 Glu Gly Val Leu Val Cys Glu Ala Leu Ala Ser Phe Gly Ser Pro Trp
 115 120 125
 Thr Ala Val Phe Gln Gly Glu Ala Pro Arg Lys Ala Arg Leu Val Val
 130 135 140

Gly Asp Ala Arg Arg Thr Ala Leu Gly Phe Leu Asp Pro Ala Arg Leu
 145 150 155 160
 Thr Ser Pro Thr Ala Lys Pro Ala Arg Met Trp Arg His Ser Pro Ser
 165 170 175
 Leu Arg Ala Pro
 180

<210> 3715

<211> 111

<212> PRT

<213> Homo sapiens

<400> 3715

Met Pro Pro Cys Ile Gln Pro Arg Lys Tyr Trp Thr Leu Gln Arg Pro
 1 5 10 15
 Val Cys Ser Val Asn Leu Ala Pro Ser Gly Pro Pro Glu Thr His Arg
 20 25 30
 Val Ser Arg Ala Val Gly Met Pro Leu Ser Leu Thr His Pro Thr Leu
 35 40 45
 Phe Gln Ala Arg His Pro Ser Leu Phe Leu Thr Leu Asp Tyr Val Leu
 50 55 60
 Val Tyr Pro Leu Thr Ser Gly Ser Val Ser Gln Leu Ile Ile Ser Leu
 65 70 75 80
 Ser His Ser Leu Ser His Ser Pro Ser Arg Ser His Ser Leu Ala Leu
 85 90 95
 Leu Arg Phe Thr Arg Leu Ala Ile Ser Thr Ser Asp Thr Leu Pro
 100 105 110

<210> 3716

<211> 138

<212> PRT

<213> Homo sapiens

<400> 3716

Met Thr Leu Gly Cys Asp Leu Gly Gln Met Val Ser Arg Glu Thr Ala
 1 5 10 15
 Gly Asn Cys His His Ser Ile Ser Leu Arg Thr Pro Met Asp Cys Cys
 20 25 30
 Ala Gln Arg Arg Pro His Gly Tyr His Ser Gly Cys Gln Trp Pro His
 35 40 45
 Thr Val Ser Thr Phe Pro Gly Glu Leu Arg Ser Arg Leu Trp Val Trp
 50 55 60
 His Phe Ala Ser Val Pro Arg Val Lys Cys Ala Ser Ala Ser Phe Leu
 65 70 75 80
 Glu Asp Arg Val Cys Asp Phe Cys Asp Ser Ala Leu Ala Gln Asp Ser
 85 90 95
 Arg Asp His Val His Ile Cys Arg Pro Ser Arg Glu Gln Arg Glu Thr
 100 105 110
 Phe Arg Ala Val Ile Lys Thr Ser Gln Ala Glu Asn Ser Leu Cys Pro
 115 120 125
 His Trp His Thr Trp Cys Leu Tyr Phe His
 130 135

<210> 3717

<211> 252

<212> PRT

<213> Homo sapiens

<400> 3717

Met Leu His Gln Ser Gly Lys Phe Leu Ile Pro Asp Ile Lys Glu Glu
 1 5 10 15
 Glu Lys Ser Tyr Gln Val Ile Arg Trp Phe Ser Pro Glu Asp His Gln
 20 25 30
 Lys Arg Ile Lys Lys His Phe Asp Ser Tyr Ile Glu Thr Ala Leu Asp
 35 40 45
 Gly Arg Lys Glu Ser Glu Ala Leu Val Lys Leu Met Glu Ile Phe Gly
 50 55 60
 Thr Gln Cys Ser Tyr Leu Leu Ser Arg Lys Asp Ile Met Asp Ser Leu
 65 70 75 80

Lys	Asn	Glu	Asn	Tyr	Asp	Leu	Val	Phe	Val	Glu	Ala	Phe	Asp	Phe	Cys	
85					90					95						
Ser	Phe	Leu	Ile	Ala	Glu	Lys	Leu	Val	Lys	Pro	Phe	Val	Ala	Ile	Leu	
100					105					110						
Pro	Thr	Thr	Phe	Gly	Ser	Leu	Asp	Phe	Gly	Leu	Pro	Ser	Pro	Leu	Ser	
115					120					125						
Tyr	Val	Pro	Val	Phe	Pro	Ser	Leu	Leu	Thr	Asp	His	Met	Asp	Phe	Trp	
130					135					140						
Gly	Arg	Val	Lys	Asn	Phe	Leu	Met	Phe	Phe	Ser	Phe	Ser	Arg	Ser	Gln	
145					150					155					160	
Trp	Asp	Met	Gln	Ser	Thr	Phe	Asp	Asn	Thr	Ile	Lys	Glu	His	Phe	Pro	
165					170					175						
Glu	Gly	Ser	Arg	Pro	Val	Leu	Ser	His	Leu	Leu	Leu	Lys	Ala	Glu	Leu	
180					185					190						
Trp	Phe	Val	Asn	Ser	Asp	Phe	Ala	Phe	Asp	Phe	Ala	Arg	Pro	Leu	Leu	
195					200					205						
Pro	Asn	Thr	Val	Tyr	Ile	Gly	Gly	Leu	Met	Glu	Lys	Pro	Ile	Lys	Pro	
210					215					220						
Val	Pro	Gln	Asn	Gly	Gln	Pro	Ala	Leu	Phe	Thr	Thr	Pro	Ser	Leu	Phe	
225					230					235					240	
Ser	Ser	Gly	Val	Tyr	Pro	Glu	Pro	Leu	Arg	Trp	Leu					
245					250											

<210> 3718

<211> 392

<212> PRT

<213> Homo sapiens

<400> 3718

Met	Gln	Ser	Gly	Gly	Ser	Leu	Pro	Phe	Cys	Cys	Tyr	Leu	Pro	Ser	Val
1				5					10					15	
Ser	Ser	Gln	Leu	Leu	Leu	Arg	Glu	Ser	Tyr	Cys	Asn	Phe	Ile	Lys	Arg
			20					25					30		
Thr	Gln	Cys	Lys	Ser	Ser	Lys	Leu	Met	Phe	Ser	Arg	Asp	Phe	Leu	Ser
			35				40						45		

Gly Gln Lys Tyr Cys Arg Cys Leu Leu Trp Ala Leu Pro Asp His Pro
 50 55 60
 Arg Arg Arg Gly Pro Thr Ser Ala Asn Ala Leu Pro Leu Ser Ala Glu
 65 70 75 80
 Leu Val Met Leu Leu Glu Trp Trp Ser Cys Thr Glu Cys Thr Leu Phe
 85 90 95
 Thr Asp Gln Ala Thr Val Glu Arg Phe Gly Lys Glu His Ala Val Ile
 100 105 110
 Ile Leu Asn His Asn Phe Glu Ile Asp Phe Leu Cys Gly Trp Thr Met
 115 120 125
 Cys Glu Arg Phe Gly Val Leu Gly Ser Ser Lys Val Leu Ala Lys Lys
 130 135 140
 Glu Leu Leu Tyr Val Pro Leu Ile Gly Trp Thr Trp Tyr Phe Leu Glu
 145 150 155 160
 Ile Val Phe Cys Lys Arg Lys Trp Glu Glu Asp Arg Asp Thr Val Val
 165 170 175
 Glu Gly Leu Arg Arg Leu Ser Asp Tyr Pro Glu Tyr Met Trp Phe Leu
 180 185 190
 Leu Tyr Cys Glu Gly Thr Arg Phe Thr Glu Thr Lys His Arg Val Ser
 195 200 205
 Met Glu Val Ala Ala Ala Lys Gly Leu Pro Val Leu Lys Tyr His Leu
 210 215 220

 Leu Pro Arg Thr Lys Gly Phe Thr Thr Ala Val Lys Cys Leu Arg Gly
 225 230 235 240
 Thr Val Ala Ala Val Tyr Asp Val Thr Leu Asn Phe Arg Gly Asn Lys
 245 250 255
 Asn Pro Ser Leu Leu Gly Ile Leu Tyr Gly Lys Lys Tyr Glu Ala Asp
 260 265 270
 Met Cys Val Arg Arg Phe Pro Leu Glu Asp Ile Pro Leu Asp Glu Lys
 275 280 285
 Glu Ala Ala Gln Trp Leu His Lys Leu Tyr Gln Glu Lys Asp Ala Leu
 290 295 300
 Gln Glu Ile Tyr Asn Gln Lys Gly Met Phe Pro Gly Glu Gln Phe Lys
 305 310 315 320
 Pro Ala Arg Arg Pro Trp Thr Leu Leu Asn Phe Leu Ser Trp Ala Thr

325 330 335
 Ile Leu Leu Ser Pro Leu Phe Ser Phe Val Leu Gly Val Phe Ala Ser
 340 345 350
 Gly Ser Pro Leu Leu Ile Leu Thr Phe Leu Gly Phe Val Gly Ala Ala
 355 360 365
 Ser Phe Gly Val Arg Arg Leu Ile Gly Val Thr Glu Ile Glu Lys Gly
 370 375 380
 Ser Ser Tyr Gly Asn Gln Glu Phe
 385 390

<210> 3719

<211> 148

<212> PRT

<213> Homo sapiens

<400> 3719

Met Asn Tyr Leu Phe Leu Gly Gly Cys Leu His Glu Pro Val Ser His
 1 5 10 15
 Lys Phe Val Phe Phe Phe Phe Phe Phe Phe Phe Phe Phe Arg Arg
 20 25 30
 Thr Phe Ala Leu Val Ala Gln Ala Gly Val Gln Trp Arg Asn Leu Gly
 35 40 45
 Ser Pro Gln Pro Pro Pro Pro Arg Phe Lys Gln Phe Ser Arg Leu Ser
 50 55 60
 Leu Pro Ser Ser Trp Asp Tyr Arg His Ala Pro Ser Arg Leu Ala Asn
 65 70 75 80
 Phe Phe Phe Phe Phe Val Phe Leu Val Glu Met Gly Phe Leu His Val
 85 90 95
 Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser Gly Asp Pro Pro Thr Ser
 100 105 110
 Ala Cys Gln Ser Ala Gly Ile Thr Ser Val Ser His His Ala Gln Pro
 115 120 125
 Ile Ser Leu Phe Ser Lys Lys Lys Gly Gly Arg Phe Leu Lys Ile Phe
 130 135 140
 Ser Ala Phe Ala

145

<210> 3720

<211> 152

<212> PRT

<213> Homo sapiens

<400> 3720

Met Glu Ala Glu Ala Trp Gly Ser Gln Ala Arg Ala Gly Leu Gly Ala
 1 5 10 15
 Ala Glu Asn Cys Leu Glu Gly Gly Asn Gln Ala Phe Leu Leu Glu Arg
 20 25 30
 Val Thr Gly Thr Lys Gly Arg Gly Gln Gly Gln Pro Leu Glu Arg Ala
 35 40 45
 Gly Glu Glu Gly Glu Ala Gly Gly Asp Pro Arg Arg Asp Pro Gly Glu
 50 55 60
 Val Val Ala Lys Ser Arg Val Arg Ala Arg Pro His Leu Ser Leu Tyr
 65 70 75 80
 Pro Ala Leu Pro Gly Val Ala Leu Ala Leu Leu Cys Cys Pro Leu Gln
 85 90 95
 Asp Arg Cys Leu Arg Leu Val Pro Ala Cys Pro Thr Ala Gly Pro Gln
 100 105 110
 His Pro Gln Val Leu Pro Trp Ala Leu Gln Lys Gln Gly Val Val Arg
 115 120 125
 Ser Gly Pro Trp Ala Thr Glu Glu Met Val Trp Gly Thr Arg Thr Gly
 130 135 140
 Val Gly Gly Leu Thr Ala Val Phe
 145 150

<210> 3721

<211> 147

<212> PRT

<213> Homo sapiens

<400> 3721

Met Asn Leu Pro His Cys Ser Gly Asn Ser Arg Gly Arg Pro Pro Pro
 1 5 10 15
 Gly Pro Ala Met Arg Arg Asp Gly Gln Ala Gly Pro Ala Leu Gly Gly
 20 25 30
 Gly Arg Pro Pro Pro His Thr Tyr Leu Glu Arg Pro Glu Ala Gln Leu
 35 40 45
 Lys Gln Tyr Leu Val Phe Gly Gly Asp Ala Asp Gly Lys His Gly Lys
 50 55 60
 His His Val Val Asp Ala Glu Gln Arg Asp Lys Gln Glu Arg Gly Leu
 65 70 75 80
 Gly Gln Pro Pro Ala Gln Lys Glu Met Ser Gln Leu Ser Cys Trp Thr
 85 90 95
 Leu Gly Pro Ser Ala Ser Leu Ala Gly Ser Phe Ser Gly Gly Gly Ser
 100 105 110
 Trp Val Trp Glu Gly Leu His Thr Ser Ser Pro Leu Leu Glu Ser Pro
 115 120 125
 Pro Asn Lys Lys Asn His Cys Phe Phe Thr Phe Met Ser Glu Ala Pro
 130 135 140
 Val His Ile
 145

<210> 3722

<211> 106

<212> PRT

<213> Homo sapiens

<400> 3722

Met Asp Asn Pro Leu Leu Lys Tyr Ser Ala Lys Asp Tyr Phe Phe Lys
 1 5 10 15
 Ala Ala Leu Cys His Phe Ile Val Asp Glu Leu Asn Ala Lys Leu Ala
 20 25 30
 Leu Glu Lys Tyr Glu Glu Met Phe Pro Ala Phe Thr Asp Ser Arg Glu
 35 40 45
 Cys Lys Leu Leu Lys Lys Leu Leu Glu Ala His Glu Glu Gln Asn Ser

50 55 60
 Glu Ala Tyr Thr Glu Ala Val Lys Glu Phe Asp Ser Ile Ser Arg Leu
 65 70 75 80
 Asp Gln Trp Leu Thr Thr Met Leu Leu Arg Ile Lys Lys Ser Ile Gln
 85 90 95
 Gly Asp Gly Glu Gly Asp Gly Asp Leu Lys
 100 105

<210> 3723

<211> 532

<212> PRT

<213> Homo sapiens

<400> 3723

Met Ser Ile His Leu Arg Glu Asp Ser Ser Gln Thr His Val Leu Met
 1 5 10 15
 Met Lys Gly Ala Pro Glu Arg Ile Leu Glu Phe Cys Ser Thr Phe Leu
 20 25 30
 Leu Asn Gly Gln Glu Tyr Ser Met Asn Asp Glu Met Lys Glu Ala Phe
 35 40 45
 Gln Asn Ala Tyr Leu Glu Leu Gly Gly Leu Gly Glu Arg Val Leu Gly
 50 55 60
 Phe Cys Phe Leu Asn Leu Pro Ser Ser Phe Ser Lys Gly Phe Pro Phe
 65 70 75 80
 Asn Thr Asp Glu Ile Asn Phe Pro Met Asp Asn Leu Cys Phe Val Gly
 85 90 95
 Leu Ile Ser Met Ile Asp Pro Pro Arg Ala Ala Val Pro Asp Ala Val
 100 105 110
 Ser Lys Cys Arg Ser Ala Gly Ile Lys Val Ile Met Val Thr Gly Asp
 115 120 125
 His Pro Ile Thr Ala Lys Ala Ile Ala Lys Gly Val Gly Ile Ile Ser
 130 135 140
 Glu Gly Thr Glu Thr Ala Glu Glu Val Ala Ala Arg Leu Lys Ile Pro
 145 150 155 160
 Ile Ser Lys Val Asp Ala Ser Ala Ala Lys Ala Ile Val Val His Gly

	165		170		175										
Ala	Glu	Leu	Lys	Asp	Ile	Gln	Ser	Lys	Gln	Leu	Asp	Gln	Ile	Leu	Gln
	180		185		190										
Asn	His	Pro	Glu	Ile	Val	Phe	Ala	Arg	Thr	Ser	Pro	Gln	Gln	Lys	Leu
	195		200		205										
Ile	Ile	Val	Glu	Gly	Cys	Gln	Arg	Leu	Gly	Ala	Val	Val	Ala	Val	Thr
	210		215		220										
Gly	Asp	Gly	Val	Asn	Asp	Ser	Pro	Ala	Leu	Lys	Lys	Ala	Asp	Ile	Gly
225			230		235				240						
Ile	Ala	Met	Gly	Ile	Ser	Gly	Ser	Asp	Val	Ser	Lys	Gln	Ala	Ala	Asp
	245		250		255										
Met	Ile	Leu	Leu	Asp	Asp	Asn	Phe	Ala	Ser	Ile	Val	Thr	Gly	Val	Glu
	260		265		270										
Glu	Gly	Arg	Leu	Ile	Phe	Asp	Asn	Leu	Lys	Lys	Ser	Ile	Met	Tyr	Thr
	275		280		285										
Leu	Thr	Ser	Asn	Ile	Pro	Glu	Ile	Thr	Pro	Phe	Leu	Met	Phe	Ile	Ile
	290		295		300										
Leu	Gly	Ile	Pro	Leu	Pro	Leu	Gly	Thr	Ile	Thr	Ile	Leu	Cys	Ile	Asp
305			310		315				320						
Leu	Gly	Thr	Asp	Met	Val	Pro	Ala	Ile	Ser	Leu	Ala	Tyr	Glu	Ser	Ala
	325		330		335										
Glu	Ser	Asp	Ile	Met	Lys	Arg	Leu	Pro	Arg	Asn	Pro	Lys	Thr	Asp	Asn
	340		345		350										
Leu	Val	Asn	His	Arg	Leu	Ile	Gly	Met	Ala	Tyr	Gly	Gln	Ile	Gly	Met
	355		360		365										
Ile	Gln	Ala	Leu	Ala	Gly	Phe	Phe	Thr	Tyr	Phe	Val	Ile	Leu	Ala	Glu
	370		375		380										
Asn	Gly	Phe	Arg	Pro	Val	Asp	Leu	Leu	Gly	Ile	Arg	Leu	His	Trp	Glu
385			390		395				400						
Asp	Lys	Tyr	Leu	Asn	Asp	Leu	Glu	Asp	Ser	Tyr	Gly	Gln	Gln	Trp	Thr
	405		410		415										
Tyr	Glu	Gln	Arg	Lys	Val	Val	Glu	Phe	Thr	Cys	Gln	Thr	Ala	Phe	Phe
	420		425		430										
Val	Thr	Ile	Val	Val	Val	Gln	Trp	Ala	Asp	Leu	Ile	Ile	Ser	Lys	Thr
	435		440		445										
Arg	Arg	Asn	Ser	Leu	Phe	Gln	Gln	Gly	Met	Arg	Asn	Lys	Val	Leu	Ile

450 455 460
 Phe Gly Ile Leu Glu Glu Thr Leu Leu Ala Ala Phe Leu Ser Tyr Thr
 465 470 475 480
 Pro Gly Met Asp Val Ala Leu Arg Met Tyr Pro Leu Lys Ile Thr Trp
 485 490 495
 Trp Leu Cys Ala Ile Pro Tyr Ser Ile Leu Ile Phe Val Tyr Asp Glu
 500 505 510
 Ile Arg Lys Leu Leu Ile Arg Gln His Pro Asp Gly Trp Val Glu Arg
 515 520 525
 Glu Thr Tyr Tyr
 530

<210> 3724

<211> 1139

<212> PRT

<213> Homo sapiens

<400> 3724

Met Ala Gly Ile Ile Lys Lys Gln Ile Leu Lys His Leu Ser Arg Phe
 1 5 10 15
 Thr Lys Asn Leu Ser Pro Asp Lys Ile Asn Leu Ser Thr Leu Lys Gly
 20 25 30
 Glu Gly Glu Leu Lys Asn Leu Glu Leu Asp Glu Glu Val Leu Gln Asn
 35 40 45
 Met Leu Asp Leu Pro Thr Trp Leu Ala Ile Asn Lys Val Phe Cys Asn
 50 55 60
 Lys Ala Ser Ile Arg Ile Pro Trp Thr Lys Leu Lys Thr His Pro Ile
 65 70 75 80
 Cys Leu Ser Leu Asp Lys Val Ile Met Glu Met Ser Thr Cys Glu Glu
 85 90 95
 Pro Arg Ser Pro Asn Gly Pro Ser Pro Ile Ala Thr Ala Ser Gly Gln
 100 105 110
 Ser Glu Tyr Gly Phe Ala Glu Lys Val Val Glu Gly Ile Ser Val Ser
 115 120 125
 Val Asn Ser Ile Val Ile Arg Ile Gly Ala Lys Ala Phe Asn Ala Ser

130	135	140	
Phe Glu Leu Ser Gln Leu Arg Ile Tyr Ser Val Asn Ala His Trp Glu			
145	150	155	160
His Gly Asp Leu Arg Phe Thr Arg Ile Gln Asp Pro Gln Arg Gly Glu			
	165	170	175
Val Leu Thr Phe Lys Glu Ile Asn Trp Gln Met Ile Arg Ile Glu Ala			
	180	185	190
Asp Ala Thr Gln Ser Ser His Leu Glu Ile Met Cys Ala Pro Val Arg			
	195	200	205
Leu Ile Thr Asn Gln Ser Lys Ile Arg Val Thr Leu Lys Arg Met Leu			
	210	215	220
Lys Asp Cys Asn Val Ile Ala Thr Lys Leu Val Leu Ile Leu Asp Asp			
225	230	235	240
Leu Leu Trp Val Leu Thr Asp Pro Gln Leu Lys Ala Met Val Gln Tyr			
	245	250	255
Ala Lys Ser Leu Ser Glu Ala Ile Glu Lys Ser Thr Glu Gln Arg Lys			
	260	265	270
Ser Met Ala Pro Glu Pro Thr Gln Ser Ser Thr Val Val Ala Ser Ala			
	275	280	285
Gln Gln Val Lys Thr Thr Gln Thr Ser Asn Ala Pro Asp Val Asn Asp			
	290	295	300
Ala Ile Val Lys Leu Phe Asn Asp Phe Asp Val Lys Glu Thr Ser His			
305	310	315	320
His Leu Val Ile Ser His Leu Asp Leu His Ile Cys Asp Asp Ile His			
	325	330	335
Ala Lys Glu Lys Glu Ser Asn Arg Arg Ile Thr Gly Gly Ala Met Gln			
	340	345	350
Leu Ser Phe Thr Gln Leu Thr Ile Asp Tyr Tyr Pro Tyr His Lys Ala			
	355	360	365
Gly Asp Ser Cys Asn His Trp Met Tyr Phe Ser Asp Ala Thr Lys Thr			
	370	375	380
Lys Asn Gly Trp Ala Asn Glu Leu Leu His Glu Phe Glu Cys Asn Val			
385	390	395	400
Glu Met Leu Lys Gln Ala Val Lys Asp His Asn Val Gly Ser Pro Pro			
	405	410	415
Lys Ser Pro Thr His Ala Ser Pro Gln His Thr Gln Thr Glu Lys Asp			

420	425	430
Tyr Pro Leu Lys Gly Thr Cys Arg Thr Pro Ser Val	Leu Ser Gln Gln	
435	440	445
Ser Lys Ala Lys Leu Met Ser Ser Ser Val Val Val	Arg Leu Ala Asp	
450	455	460
Phe Asn Ile Tyr Gln Val Ser Thr Ala Glu Gln Cys Arg Ser Ser Pro		
465	470	475
Lys Ser Met Ile Cys Cys Asn Lys Lys Ser Leu Tyr Leu Pro Gln Glu		
485	490	495
Met Ser Ala Val Tyr Ile Glu Phe Thr Glu Tyr Tyr Tyr Pro Asp Gly		
500	505	510
Lys Asp Phe Pro Ile Pro Ser Pro Asn Leu Tyr Ser Gln Leu Asn Ala		
515	520	525
Leu Gln Phe Thr Val Asp Glu Arg Ser Ile Leu Trp Leu Asn Gln Phe		
530	535	540
Leu Leu Asp Leu Lys Gln Ser Leu Asn Gln Phe Met Ala Val Tyr Lys		
545	550	555
Leu Asn Asp Asn Ser Lys Ser Asp Glu His Val Asp Val Arg Val Asp		
565	570	575
Gly Leu Met Leu Lys Phe Val Ile Pro Ser Glu Val Lys Ser Glu Cys		
580	585	590
His Gln Asp Gln Pro Arg Ala Ile Ser Ile Gln Ser Ser Glu Met Ile		
595	600	605
Ala Thr Asn Thr Arg His Cys Pro Asn Cys Arg His Ser Asp Leu Glu		
610	615	620
Ala Leu Phe Gln Asp Phe Lys Asp Cys Asp Phe Phe Ser Lys Thr Tyr		
625	630	635
Thr Ser Phe Pro Lys Ser Cys Asp Asn Phe Asn Leu Leu His Pro Ile		
645	650	655
Phe Gln Arg His Ala His Glu Gln Asp Thr Lys Met His Glu Ile Tyr		
660	665	670
Lys Gly Asn Ile Thr Pro Gln Leu Asn Lys Asn Thr Leu Lys Thr Ser		
675	680	685
Ala Ala Thr Asp Val Trp Ala Val Tyr Phe Ser Gln Phe Trp Ile Asp		
690	695	700
Tyr Glu Gly Met Lys Ser Gly Lys Gly Arg Pro Ile Ser Phe Val Asp		

705	710	715	720
Ser Phe Pro Leu Ser Ile Trp Ile Cys Gln Pro Thr Arg Tyr Ala Glu			
725	730	735	
Ser Gln Lys Glu Pro Gln Thr Cys Asn Gln Val Ser Leu Asn Thr Ser			
740	745	750	
Gln Ser Glu Ser Ser Asp Leu Ala Gly Arg Leu Lys Arg Lys Lys Leu			
755	760	765	
Leu Lys Glu Tyr Tyr Ser Thr Glu Ser Glu Pro Leu Thr Asn Gly Gly			
770	775	780	
Gln Lys Pro Ser Ser Ser Asp Thr Phe Phe Arg Phe Ser Pro Ser Ser			
785	790	795	800
Ser Glu Ala Asp Ile His Leu Leu Val His Val His Lys His Val Ser			
805	810	815	
Met Gln Ile Asn His Tyr Gln Tyr Leu Leu Leu Leu Phe Leu His Glu			
820	825	830	
Ser Leu Ile Leu Leu Ser Glu Asn Leu Arg Lys Asp Val Glu Ala Val			
835	840	845	
Thr Gly Ser Pro Ala Ser Gln Thr Ser Ile Cys Ile Gly Ile Leu Leu			
850	855	860	
Arg Ser Ala Glu Leu Ala Leu Leu Leu His Pro Val Asp Gln Ala Asn			
865	870	875	880
Thr Leu Lys Ser Pro Val Ser Glu Ser Val Ser Pro Val Val Pro Asp			
885	890	895	
Tyr Leu Pro Thr Glu Asn Gly Asp Phe Leu Ser Ser Lys Arg Lys Gln			
900	905	910	
Ile Ser Arg Asp Ile Asn Arg Ile Arg Ser Val Thr Val Asn His Met			
915	920	925	
Ser Asp Asn Arg Ser Met Ser Val Asp Leu Ser His Ile Pro Leu Lys			
930	935	940	
Asp Pro Leu Leu Phe Lys Ser Ala Ser Asp Thr Asn Leu Gln Lys Gly			
945	950	955	960
Ile Ser Phe Met Asp Tyr Leu Ser Asp Lys His Leu Gly Lys Ile Ser			
965	970	975	
Glu Asp Glu Ser Ser Gly Leu Val Tyr Lys Ser Gly Ser Gly Glu Ile			
980	985	990	
Gly Ser Glu Thr Ser Asp Lys Lys Asp Ser Phe Tyr Thr Asp Ser Ser			

995 1000 1005
 Ser Ile Leu Asn Tyr Arg Glu Asp Ser Asn Ile Leu Ser Phe Asp Ser
 1010 1015 1020
 Asp Gly Asn Gln Asn Ile Leu Ser Ser Thr Leu Thr Ser Lys Gly Asn
 1025 1030 1035 1040
 Glu Thr Ile Glu Ser Ile Phe Lys Ala Glu Asp Leu Leu Pro Glu Ala
 1045 1050 1055
 Ala Ser Leu Ser Glu Asn Leu Asp Ile Ser Lys Glu Glu Thr Pro Pro
 1060 1065 1070
 Val Arg Thr Leu Lys Ser Gln Ser Ser Leu Ser Gly Lys Pro Lys Glu
 1075 1080 1085
 Arg Cys Pro Pro Asn Leu Ala Pro Leu Cys Val Ser Tyr Lys Asn Met
 1090 1095 1100
 Lys Arg Ser Ser Ser Gln Met Ser Leu Asp Thr Ile Ser Leu Asp Ser
 1105 1110 1115 1120
 Met Ile Leu Glu Glu Gln Leu Leu Glu Ser Asp Gly Ser Asp Ser His
 1125 1130 1135
 Met Phe Leu

<210> 3725

<211> 317

<212> PRT

<213> Homo sapiens

<400> 3725

Met Ser Pro Ser Val Thr Ala Gln Pro Leu Asp Leu Gly Leu Thr Ile
 1 5 10 15
 Thr Pro Glu Pro Thr Thr Glu Val Glu His Ser Thr Pro Leu Lys Lys
 20 25 30
 Ile Pro Pro Lys His Pro Lys Val Thr Leu Pro His Pro Asp Gln Val
 35 40 45
 Gln Thr Leu His Ser Asn Leu Thr Gln Val Thr Val Gln Pro Leu Asp
 50 55 60
 Leu Glu Leu Thr Leu Thr Pro Glu Ser Thr Met Glu Val Glu Pro Phe

65		70		75		80
Pro Thr Met Gln Lys Thr Pro Thr Gln Pro Pro Glu Leu Arg Lys Glu						
	85		90		95	
Val Val Ala Gln Pro Pro Val Tyr Tyr Glu Thr Ser Met Pro Thr Arg						
	100		105		110	
Gly Gln Asp Gln Ala Gln His Pro Thr Ser Pro Arg Val Thr Val Gln						
	115		120		125	
Pro Leu Asp Leu Gly Leu Thr Ile Thr Pro Glu Ser Ile Thr Lys Val						
	130		135		140	
Glu Pro Ser Thr Ala Leu Met Thr Thr Ala Pro Pro Pro Glu His Leu						
145		150		155		160
Glu Val Thr Leu Pro Pro Pro Asp Lys Gly Gln Ala Gln His Ser Asn						
	165		170		175	
Leu Thr Gln Val Thr Val Gln Pro Leu Asp Leu Glu Leu Thr Ile Thr						
	180		185		190	
Ile Glu Pro Thr Ile Asp Val Lys Pro Ser Pro Thr Thr Glu Glu Thr						
	195		200		205	
Ser Thr Gln Ser Pro Asp Leu Gly Leu Ala Ile Thr Pro Glu Pro Thr						
	210		215		220	
Thr Glu Ile Gly Tyr Ser Thr Ala Leu Glu Lys Thr Ile Ala Pro Arg						
225		230		235		240
Pro Asp Gln Val Gln Thr Gln His Arg Asn Leu Thr Glu Val Thr Gly						
	245		250		255	
Pro Pro Thr Glu Leu Glu Pro Thr Gln Asp Ser Leu Val Gln Ser Glu						
	260		265		270	
Asn Tyr Ala Gln Asn Lys Ala Leu Thr Ala Pro Glu Glu Gln Lys Ala						
	275		280		285	
Ser Thr Ser Thr Asn Ile Cys Asp Leu Cys Thr Cys Gly Asp Glu Thr						
	290		295		300	
Leu Ser Cys Ile Asp Leu Ser Pro Lys Gln Arg Leu Arg						
305		310		315		

<210> 3726

<211> 147

<212> PRT

<213> Homo sapiens

<400> 3726

```

Met Ser Gln Gly Leu Leu Gly Ala Phe Cys Phe Leu Phe Trp Val Ser
 1              5              10              15
Phe Phe Phe Pro Phe Leu Leu Ser Pro Phe Leu Phe Leu Leu Pro Leu
      20              25              30
Pro Leu Ser Leu Phe Pro Phe Leu Phe Pro Phe Pro Leu Ser Ser Phe
      35              40              45
Ser Ser Phe Pro Ser Leu Pro Phe Pro Phe Phe Phe Ser Phe Pro Phe
      50              55              60
Pro Phe Asp Lys Val Pro Arg Leu Asp Ala Ile Thr Ala His Cys Asp
65              70              75              80
Leu His Leu Leu Gly Cys Ser Asn Pro Pro Thr Leu Ala Ser Gly Val
      85              90              95
Ala Gly Ile Thr Gly Ala Asp His His Thr Trp Leu Ile Phe Val Phe
      100             105             110
Phe Val Glu Leu Gly Phe Gln Pro Cys Cys Pro Gly Trp Ser Gln Thr
      115             120             125
Pro Glu Leu Lys Arg Ser His Pro Pro Trp Pro Pro Lys Val Leu Gly
      130             135             140
Leu Gln Ala
145

```

<210> 3727

<211> 166

<212> PRT

<213> Homo sapiens

<400> 3727

```

Met Phe Leu Phe His Ser Gly Leu Cys Ser Asp Phe Thr Ser Ser Gln
 1              5              10              15
Gly Pro Leu Leu Gly Pro Ser Leu Asp Trp Pro Leu Cys His Ser Arg
      20              25              30
Ser Leu Pro Val Leu Tyr Pro Ala Leu His Leu Met Ser His Asn Ser

```

35 40 45
 Phe Phe Phe Phe Phe Glu Thr Glu Ser His Ser Val Ser Arg Leu Glu

 50 55 60
 Cys Asn Gly Ala Ile Ser Ala His Cys Asn Leu Cys Leu Pro Gly Ser
 65 70 75 80
 Ser Asp Ser Pro Ala Ser Ala Ser Gln Val Ala Gly Thr Thr Gly Val
 85 90 95
 Cys His His Ala Gln Leu Ile Leu Phe Val Phe Leu Val Lys Thr Gly
 100 105 110
 Phe Cys His Val Gly Gln Ala Arg Leu Glu Leu Leu Thr Ser Ser Asp
 115 120 125
 Pro Pro Thr Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Val Ser His
 130 135 140
 Arg Thr Arg Pro Cys Gly His Ile Thr Leu Tyr Val Pro Leu Ser Leu
 145 150 155 160
 Pro Arg Leu Leu Ala Ser
 165

<210> 3728

<211> 164

<212> PRT

<213> Homo sapiens

<400> 3728

Met Asn Asn Ser Leu Asp Tyr Leu Ala Tyr Pro Val Ile Val Ser Asn
 1 5 10 15
 His Arg Gln Ser Thr Thr Phe Arg Lys Lys Leu Asp Phe Gly His Tyr
 20 25 30
 Val Ser His Lys Asn Arg Ile Gln Ile Ala Lys Pro Thr Val Asp Thr
 35 40 45
 Lys Pro Pro Val Ala His Thr Asn His Ile Leu Lys Leu Ser Lys Leu
 50 55 60
 Gln Gly Glu Gln Lys Lys Ile Asn Lys Ile Glu Tyr Glu Asn Lys Gln
 65 70 75 80

Leu Cys Gln Lys Ile Ala Asn Ala His Arg Gly Pro Ala Lys Val Asp
 85 90 95
 Cys Trp Asn Glu Tyr Phe Ser Lys Ser Leu Asn Arg Glu Thr Arg Asn
 100 105 110
 Arg Glu Leu Val Arg Ile Thr Met Glu Asn Gln Gly Ile Leu Lys Arg
 115 120 125
 Leu Val Asp Arg Lys Pro His Tyr Asp Arg Arg Ala Ser Glu Ile Asp
 130 135 140
 Trp Gln Asn Ser Arg Arg Tyr Ile Arg Asn Thr Thr Arg Tyr Leu Leu
 145 150 155 160
 Ser Gln Asn Glu

<210> 3729

<211> 109

<212> PRT

<213> Homo sapiens

<400> 3729

Met Ser His His Ala Lys Pro Lys Pro Gly Val Gln Trp Cys Lys Phe
 1 5 10 15
 Gln Ser Glu Ser Thr Gly Arg Arg Ala Arg Ser Ala Asp Val Gln Gly
 20 25 30
 Gln Glu Lys Met Asp Val Thr Ala Gln Glu Ala Arg Thr Asn Leu Pro
 35 40 45
 Phe Tyr Leu Phe Val Leu Phe Ser Pro Gly Ser Leu Gly Gln Glu Ala
 50 55 60
 Ala Ala Val Lys Gln Ser His Ile Ser Ala Pro Ala Ser Glu Leu Arg
 65 70 75 80
 Cys Ile Gln Leu Arg Ser Arg Ser Arg Thr Arg Gly Asn Lys Ile Ile
 85 90 95
 Trp Glu Gln Gly Gln Glu Gly Ala Gly Leu His Gly Arg
 100 105

<210> 3730

<211> 154

<212> PRT

<213> Homo sapiens

<400> 3730

```

Met Asp Pro Ala Ser Val His Pro Pro Lys Leu Cys Pro Pro Pro Phe
  1              5              10              15
Ile Phe Ile Phe Ile Phe Ile Phe Met Phe Leu Ser Ile Thr Ser Arg
      20              25              30
Arg Arg Pro Arg Lys Ala Lys Tyr Leu Asp Glu Met Leu Ser Ser Leu
      35              40              45
Pro Val Arg Leu Gln Pro Asp Ser Asn Ala Ser Ser Arg Val Val Leu
      50              55              60
Gly Ser Cys Arg Val Arg Glu Pro Leu Lys Arg Trp Pro Arg Gln Ala
      65              70              75              80
Trp His Ala Met Ser Pro Pro Gly Ala Glu Phe Arg Ala Asn Ala Leu
              85              90              95
Cys Lys Cys Leu Asn Ser Ala Asp Lys Gly His Asn Gly Glu Pro Arg
              100             105             110
Val Ala Pro Gln Ser Cys Pro Val Gly Ala Asn Arg Phe His Gln Gln
              115             120             125
Ile Leu Arg Thr Pro Glu Gly Thr Leu Arg Met Met Asp Glu Gly Thr
              130             135             140
Phe Ile Leu Pro Gly Arg Arg Arg Gly Pro
145              150

```

<210> 3731

<211> 280

<212> PRT

<213> Homo sapiens

<400> 3731

```

Met Thr Ser Leu Thr His Gly Met His Leu Thr Ser Ser Thr Ser Cys
  1              5              10              15

```

Ser Cys Gln Ser Ser Gly Thr Ser Phe Thr Ser Cys Ser Cys Arg Ser
 20 25 30
 Ser Gly Thr Ser Ser Thr Ser Arg Ser Trp Trp Ser Ser Gly Thr Ser
 35 40 45
 Ser Thr Ser Cys Ser Trp Trp Ser Ser Gly Thr Ser Ser Thr Phe Cys
 50 55 60
 Ser Cys Trp Ser Ser Gly Thr Ser Phe Thr Ser Cys Ser Cys Trp Ser
 65 70 75 80
 Ser Gly Thr Ser Ser Thr Pro Cys Ser Cys Arg Ser Ser Gly Thr Ser
 85 90 95
 Ser Thr Ser Cys Ser Cys Trp Ser Ser Gly Thr Ser Ser Thr Ser Trp
 100 105 110
 Ser Cys Lys Ser Ser Gly Thr Ser Ser Thr Cys Tyr Met Cys Leu Ser
 115 120 125
 Ser Gly Thr Ser Ser Thr Ser Tyr Ser Ser Trp Ser Ser Gln Thr Ser
 130 135 140
 Ser Thr Ser Ser Met Cys Leu Pro Ser Arg Thr Ser Ser Ile Phe Tyr
 145 150 155 160
 Ser Cys Leu Pro Leu Gly His His Leu Pro Phe Cys Ser Val Arg Pro
 165 170 175
 Leu Gly Pro Pro Thr Thr Ser Pro Leu Ser Asn Leu Trp Ile Leu Ser
 180 185 190
 His Pro Phe Tyr Leu Gly Gly Val Trp Pro Leu Asn Asn His Leu His
 195 200 205
 Met Asn Leu Leu Gly Tyr Phe Asn Asn Phe His Leu Trp Pro Leu Gly
 210 215 220
 Leu Gln Pro Leu Pro Pro Pro Gly Ser Pro Leu Val His Leu Pro Pro
 225 230 235 240
 Pro Pro Leu Gly Trp Pro Leu Leu Ser Glu Leu Leu Gln Asp Leu Asn
 245 250 255
 Gln Leu Pro Tyr Pro Leu Leu Pro Val Gly Pro Arg Pro Arg Pro Pro
 260 265 270
 His Val Leu Leu Gly Ile Phe Ile
 275 280

<210> 3732

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3732

```

Met Cys Leu Thr Ile Gln Gly Ala Ile Trp Val Arg Thr Gln Ser Gln
  1             5             10             15
Thr Ile Ser Leu Ala Asn Glu Glu Thr Glu Ser Glu Arg Ser Ser Asp
             20             25             30
Val Pro Lys Ser Ala Arg Pro Val Ser Gly Arg Ala Thr Leu Leu Glu
             35             40             45
Glu Asp Ser Pro Ala Pro His Pro Pro Cys Phe Ser Met Tyr Tyr Val
             50             55             60
Pro Ala Ser Leu Phe Ala Ala Pro Leu Glu Cys Phe Ser Met Gln Leu
             65             70             75             80
Ser Leu Gln Ser Val Val Pro Ala His Gly Leu Pro Ser Ser Ser Arg
             85             90             95
Arg Gln Asn Arg Gly Lys Pro
             100

```

<210> 3733

<211> 105

<212> PRT

<213> Homo sapiens

<400> 3733

```

Met Arg Val Met Leu Thr Phe Phe Ile Pro Lys Pro Ile Arg Ile Arg
  1             5             10             15
Phe Ala Asn Ser Ser Gly Lys Asn Gly Arg Lys Gly Ser Pro Leu Lys
             20             25             30
Ser Arg Leu Phe Tyr Cys Phe Ser Asn Ile Lys Asn Lys Gln Leu Gly
             35             40             45
Glu Val Phe Leu Phe Leu Phe Leu Phe Val Phe Gly Leu Gly Ser Val
             50             55             60

```

Gly Gly Arg Gly Leu Ser Lys Trp Cys Ala Arg Lys Ile Asn Thr Gln
 65 70 75 80
 Leu Thr Tyr Lys His Glu Gly Leu Tyr Gln Gln Lys Phe Lys Val Pro
 85 90 95
 Arg Phe Phe Leu Ile Phe Phe Cys Leu
 100 105

<210> 3734

<211> 620

<212> PRT

<213> Homo sapiens

<400> 3734

Met Lys Thr Arg Pro Ser Ser Leu Glu Ser Val Thr Cys Trp Arg Ala
 1 5 10 15
 Lys Phe Met Glu Ala Phe Phe Ser His Val Leu Arg Gly Thr Ile Asp
 20 25 30
 Val Ser Ser Asp Arg Arg Leu Cys Asp Gln Arg Phe Ser Pro Leu Leu
 35 40 45
 His Ser Ser Arg His Val Arg Gln Leu Thr Ile Cys Asn Met Leu Gln
 50 55 60
 Gly Ala Thr Glu Leu Val Ala Glu Pro Asn Arg Arg Val Leu Glu Thr
 65 70 75 80
 Leu Ala Ser Ser Leu His Thr Leu Lys Phe Arg His Leu Leu Phe Ser
 85 90 95
 Asp Val Ala Ala Gln Gln Ser Leu Arg Gln Leu Leu His Gln Leu Ile
 100 105 110
 His His Gly Ala Val Ser Gln Val Ser Leu Tyr Ser Trp Pro Val Pro
 115 120 125
 Glu Ser Ala Leu Phe Ile Leu Ile Leu Thr Met Ser Ala Gly Phe Trp
 130 135 140
 Gln Pro Gly Pro Gly Gly Pro Pro Cys Arg Leu Cys Gly Glu Ala Ser
 145 150 155 160
 Arg Gly Arg Ala Pro Ser Arg Asp Glu Gly Ser Leu Leu Leu Gly Ser
 165 170 175

Arg Arg Pro Arg Arg Asp Ala Ala Glu Arg Cys Ala Ala Ala Leu Met
 180 185 190
 Ala Ser Arg Arg Lys Ser Glu Ala Lys Gln Met Pro Arg Ala Ala Pro
 195 200 205
 Ala Thr Arg Val Thr Arg Arg Ser Thr Gln Glu Ser Leu Thr Ala Gly
 210 215 220
 Gly Thr Asp Leu Lys Arg Glu Leu His Pro Pro Ala Thr Ser His Glu
 225 230 235 240
 Ala Pro Gly Thr Lys Arg Ser Pro Ser Ala Pro Ala Ala Thr Ser Ser
 245 250 255
 Ala Ser Ser Ser Thr Ser Ser Tyr Lys Arg Ala Pro Ala Ser Ser Ala
 260 265 270
 Pro Gln Pro Lys Pro Leu Lys Arg Phe Lys Arg Ala Ala Gly Lys Lys
 275 280 285
 Gly Ala Arg Thr Arg Gln Gly Pro Gly Ala Glu Ser Glu Asp Leu Tyr
 290 295 300
 Asp Phe Val Phe Ile Val Ala Gly Glu Lys Glu Asp Gly Glu Glu Met
 305 310 315 320
 Glu Ile Gly Glu Val Ala Cys Gly Ala Leu Asp Gly Ser Asp Pro Ser
 325 330 335
 Cys Leu Gly Leu Pro Ala Leu Glu Ala Ser Gln Arg Phe Arg Ser Ile
 340 345 350
 Ser Thr Leu Glu Leu Phe Thr Val Pro Leu Ser Thr Glu Ala Ala Leu
 355 360 365
 Thr Leu Cys His Leu Leu Ser Ser Trp Val Ser Leu Glu Ser Leu Thr
 370 375 380
 Leu Ser Tyr Asn Gly Leu Gly Ser Asn Ile Phe Arg Leu Leu Asp Ser
 385 390 395 400
 Leu Arg Ala Leu Ser Gly Gln Ala Gly Cys Arg Leu Arg Ala Leu His
 405 410 415
 Leu Ser Asp Leu Phe Ser Pro Leu Pro Ile Leu Glu Leu Thr Arg Ala
 420 425 430
 Ile Val Arg Ala Leu Pro Leu Leu Arg Val Leu Ser Ile Arg Val Asp
 435 440 445
 His Pro Ser Gln Arg Asp Asn Pro Gly Val Pro Gly Asn Ala Gly Pro

450 455 460
 Pro Ser His Ile Ile Gly Asp Glu Glu Ile Pro Glu Asn Cys Leu Glu
 465 470 475 480
 Gln Leu Glu Met Gly Phe Pro Arg Gly Ala Gln Pro Ser Pro Leu Leu
 485 490 495
 Cys Ser Val Leu Lys Ala Ser Gly Ser Leu Gln Gln Leu Ser Leu Asp
 500 505 510
 Ser Ala Thr Phe Ala Ser Pro Gln Asp Phe Gly Leu Val Leu Gln Thr
 515 520 525
 Leu Lys Glu Tyr Asn Leu Ala Leu Lys Arg Leu Ser Phe His Asp Met
 530 535 540
 Asn Leu Ala Asp Cys Gln Ser Glu Val Leu Phe Leu Leu Gln Asn Leu
 545 550 555 560
 Thr Leu Gln Glu Ile Thr Phe Ser Phe Cys Arg Leu Phe Glu Lys Arg
 565 570 575
 Pro Ala Gln Phe Leu Pro Glu Met Val Ala Ala Met Lys Gly Asn Ser
 580 585 590
 Thr Leu Lys Gly Leu Arg Leu Pro Gly Asn Arg Leu Gly Gly Gly Gln
 595 600 605
 Thr Leu Gly Arg Glu Arg Gly Lys Glu Leu Gly Leu
 610 615 620

<210> 3735

<211> 278

<212> PRT

<213> Homo sapiens

<400> 3735

Met Thr Val Cys Pro Ser Leu Ser Ser Cys Thr Ala Ser Ala Ser Leu
 1 5 10 15
 Gln Leu His Ser Val Ser Leu Ser Pro Pro Ala Gln Cys Gln Pro Leu
 20 25 30
 Ser Thr Cys Thr Ala Ala Gly Ser Ser Ser Leu Ser Thr Cys Thr Ala
 35 40 45
 Ser Ala Ser Leu His Leu His Ser Val Ser Leu Ser Pro Pro Ala Gln

50 55 60
 Arg Leu Gly Ala Ala Ala Ser Pro Pro Ala Gln Arg Gln Pro Leu Ser
 65 70 75 80
 Thr Cys Thr Ala Ser Ala Ser Leu His Leu His Ser Val Ser Leu Ser
 85 90 95
 Pro Pro Ala Gln Arg Leu Gly Ala Ala Val Ser Pro Pro Ala Gln Arg
 100 105 110
 Gln Pro Leu Ser Thr Cys Thr Ala Ser Ala Ser Pro Pro Ala Gln Arg
 115 120 125
 Gln Pro Leu Ser Thr Cys Thr Val Ala Gly Ser Ser Ser Leu Ser Thr
 130 135 140
 Cys Thr Ala Ser Ala Ser Phe His Leu His Ser Val Ser Leu Ser Pro
 145 150 155 160
 Pro Ala Gln Arg Leu Gly Ala Ala Ala Ser Pro Pro Ala Gln Arg Gln
 165 170 175
 Pro Leu Ser Thr Cys Thr Ala Ala Ala Ser Pro Pro Ala Gln Arg Gln
 180 185 190
 Pro Leu Ser Thr Cys Thr Val Ala Ala Ser Leu His Leu His Ser Gly
 195 200 205
 Trp Glu Gln Gln Pro Leu His Leu His Asn Ser Ser Leu Ser Pro Pro
 210 215 220
 Ala Gln Gln Leu Gly Ala Ala Ala Ser Gln Gly Cys Cys Lys Asp Gly
 225 230 235 240
 Val Ser Thr Cys Asn Val Arg Thr Ala Pro Ala Thr His Cys Ala Val
 245 250 255
 Cys Arg Ala Val Val Met Val Thr Val Gly Val Thr Gly Gly Arg Glu
 260 265 270
 Leu Arg Asp Ser Ser Gly
 275

<210> 3736

<211> 187

<212> PRT

<213> Homo sapiens

<400> 3736

Met Asn Thr Leu Ile Phe Thr His Leu Cys Ser Leu Glu Pro Ile Thr
 1 5 10 15
 Met Ser Gln Asn Cys Ala Tyr Leu Val Leu Val Asp Thr Val Leu Gln
 20 25 30
 Asn Ile Pro Leu Lys Lys Leu Asn Asn Ser Ala Asn Phe Pro Ile Pro
 35 40 45
 Ser Leu Pro Val Asp Thr Ile Arg Leu Leu Thr Phe Leu Gln Phe Lys
 50 55 60
 Lys Thr Leu His Met His Ser Tyr Thr Gln Lys Gln Ser Leu Leu Lys
 65 70 75 80
 Cys His Leu Leu Asn Glu Val Ile Met Ile Phe Phe Leu Lys Leu Lys
 85 90 95
 Tyr His Pro Pro Gln His Ser Leu Ile Pro Phe Thr Leu Phe Ser Ile
 100 105 110
 Val Leu Thr Thr Phe Trp His Ala Val Val Ser Leu Leu Ile Leu Asp
 115 120 125
 Cys Arg Leu Gln Lys Gly Lys Ser Leu Gly Phe Cys Pro Val Asn Tyr
 130 135 140
 Glu Gln Cys Leu Ala Asp Asp Lys Lys Thr His Ile Phe Ile Glu Leu
 145 150 155 160
 Asn Gly His Gly Asn Cys Arg Ile His Met Asn Phe Ser His Ser Cys
 165 170 175
 Tyr Val Ser Pro Leu Ala His Leu Ser Leu Val
 180 185

<210> 3737

<211> 225

<212> PRT

<213> Homo sapiens

<400> 3737

Met Leu Phe Val Phe Arg Tyr Cys Arg Met Leu Glu Glu Gly Ser Phe
 1 5 10 15
 Arg Gly Arg Thr Ala Asp Phe Val Phe Met Phe Leu Phe Gly Gly Val

20 25 30
 Leu Met Thr Val Ser Phe Pro Gln Ala Leu Glu Pro Arg Ala Arg Ala
 35 40 45
 Pro Arg Arg Pro Ala Cys Val Gly Pro Gly Ala Asn Thr Ala Met Pro
 50 55 60
 Glu Arg Asp Thr Val Ala Val Ser Ser Leu Val Cys Val Glu Gly Pro
 65 70 75 80
 Leu Cys Ala Gln Leu Gln Gly Ser Gly Leu Asp Leu Gln Cys Cys Met
 85 90 95
 Gln Asn Thr Lys Pro Arg Thr Lys Glu Pro Gly Thr Val Pro Ala Leu
 100 105 110
 Gly Ala His Gly Leu Leu Ala Ala Ala Gly Gln Leu His Pro Arg Gly
 115 120 125
 Pro Ala Gly Asp Cys Gly Gly Pro Tyr Leu Leu Leu Pro Gly Gly Arg
 130 135 140
 Leu Pro Gln Pro Ala Trp Arg Gln Glu Ala Pro Ala Asp Pro Trp Leu
 145 150 155 160
 Pro Val Ser Val Glu Ser Pro Pro Ser Leu Ser Pro Pro Ser Glu Gly
 165 170 175
 Ser Pro Pro Met Gly Thr Cys Ala Gly Leu Cys Ser Thr Arg Ala Pro
 180 185 190
 Pro His Arg Lys Leu Leu Leu Asp Val Pro Ala Glu Asp Pro Asn Tyr
 195 200 205
 Leu Pro Leu Pro Glu Glu Gln Pro Gly Pro His Leu Pro Pro Pro Gln
 210 215 220
 Gln
 225

<210> 3738

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3738

Met Glu Asn Thr Leu Tyr Ile Phe Phe Phe Phe Leu Arg Trp Ser Leu

1	5	10	15												
Thr	Leu	Ser	Pro	Arg	Leu	Val	Cys	Ser	Gly	Val	Ile	Ser	Ala	His	Cys
	20		25		30										
Asn	Leu	Gln	Leu	Leu	Gly	Ser	Ser	Ala	Ser	Leu	Ala	Ser	Ala	Phe	Arg
	35		40		45										
Val	Ala	Gly	Ile	Thr	Asp	Leu	His	His	His	Ala	Gln	Leu	Ile	Phe	Val
	50		55		60										
Phe	Leu	Val	Glu	Thr	Gly	Phe	His	His	Val	Gly	Gln	Val	Gly	Leu	Glu
65			70		75				80						
Leu	Leu	Thr	Ser	Ser	Asp	Pro	Pro	Ala	Ser	Val	Ser	Glu	Ser	Ala	Gly
		85		90		95									
Ile	Thr	Gly	Met	Ser	His	Arg	Ala	Trp	Pro	Ser	Leu	Arg	Ile	Phe	Ser
	100		105		110										
Trp															

<210> 3739

<211> 447

<212> PRT

<213> Homo sapiens

<400> 3739

Met	Pro	His	Val	Leu	Ile	Glu	Lys	Gly	Asp	Met	Thr	Leu	Gly	Glu	Phe
1	5	10	15												
Asp	Gln	Arg	Leu	Lys	Gly	Arg	Thr	Asp	Phe	Ile	Lys	Gly	Met	Lys	Lys
	20		25		30										
Lys	Ser	Arg	Ala	Glu	Arg	Lys	Thr	Glu	Ile	Ile	Arg	Lys	Arg	Leu	His
	35		40		45										
Lys	Asp	Ile	Pro	His	His	Ser	Val	Ile	Met	Leu	Asn	Phe	Cys	Pro	Asp
	50		55		60										
Leu	Gln	Ser	Val	Gln	Pro	Cys	Leu	Arg	Lys	Ala	His	Gly	Glu	Phe	Ile
65			70		75				80						
Phe	Leu	Ile	Asp	Arg	Ser	Ser	Ser	Met	Ser	Gly	Ile	Ser	Met	His	Arg
		85		90		95									
Val	Lys	Asp	Ala	Met	Leu	Val	Ala	Leu	Lys	Ser	Leu	Met	Pro	Ala	Cys

100	105	110
Leu Phe Asn Ile Ile Gly Phe Gly Ser Thr Phe Lys Ser Leu Phe Pro		
115	120	125
Ser Ser Gln Thr Tyr Ser Glu Asp Ser Leu Ala Met Ala Cys Asp Asp		
130	135	140
Ile Gln Arg Met Lys Ala Asp Met Gly Gly Thr Asn Ile Leu Ser Pro		
145	150	155
Leu Lys Trp Val Ile Arg Gln Pro Val His Arg Gly His Pro Arg Leu		
165	170	175
Leu Phe Val Ile Thr Asp Gly Ala Val Asn Asn Thr Gly Lys Val Leu		
180	185	190
Glu Leu Val Arg Asn His Ala Phe Ser Thr Arg Cys Tyr Ser Phe Gly		
195	200	205
Ile Gly Pro Asn Val Cys His Arg Leu Val Lys Gly Leu Ala Ser Val		
210	215	220
Ser Glu Gly Ser Ala Glu Leu Leu Met Glu Gly Glu Arg Leu Gln Pro		
225	230	235
Lys Met Val Lys Ser Leu Lys Lys Ala Met Ala Pro Val Leu Ser Asp		
245	250	255
Val Thr Val Glu Trp Ile Phe Pro Glu Thr Thr Glu Val Leu Val Ser		
260	265	270
Pro Val Ser Ala Ser Ser Leu Phe Pro Gly Glu Arg Leu Val Gly Tyr		
275	280	285
Gly Ile Val Cys Asp Ala Ser Leu His Ile Ser Asn Pro Arg Ser Asp		
290	295	300
Lys Arg Arg Arg Tyr Ser Met Leu His Ser Gln Glu Ser Gly Ser Ser		
305	310	315
Val Phe Tyr His Ser Gln Asp Asp Gly Pro Gly Leu Glu Gly Gly Asp		
325	330	335
Cys Ala Lys Asn Ser Gly Ala Pro Phe Ile Leu Gly Gln Ala Lys Asn		
340	345	350
Ala Arg Leu Ala Ser Gly Asp Ser Thr Thr Lys His Asp Leu Asn Leu		
355	360	365
Ser Gln Arg Arg Arg Ala Tyr Ser Thr Asn Gln Ile Thr Asn His Lys		
370	375	380
Pro Leu Pro Arg Ala Thr Met Ala Ser Asp Pro Met Pro Ala Ala Lys		

385 390 395 400
 Arg Tyr Pro Leu Arg Lys Ala Arg Leu Gln Asp Leu Thr Asn Gln Thr
 405 410 415
 Ser Leu Asp Val Gln Arg Trp Gln Ile Asp Leu Gln Ala Phe Ile Cys
 420 425 430
 Leu Thr Ser Glu Asp Thr Phe Gln Ile Arg Thr Pro Thr Gly Gln
 435 440 445

<210> 3740

<211> 167

<212> PRT

<213> Homo sapiens

<400> 3740

Met Lys Ala Lys Glu Gly Arg Asn Val Tyr Ser Ser Ser Arg Tyr Asp
 1 5 10 15
 Asp Tyr Asp Arg Tyr Arg Arg Ser Arg Ser Arg Ser Tyr Glu Arg Arg
 20 25 30
 Arg Ser Arg Ser Arg Ser Phe Asp Tyr Asn Tyr Arg Arg Ser Tyr Ser
 35 40 45
 Pro Arg Asn Ser Arg Pro Thr Gly Arg Pro Arg Arg Ser Arg Ser His
 50 55 60
 Ser Asp Asn Asp Arg Phe Lys His Arg Asn Arg Ser Phe Ser Arg Ser
 65 70 75 80
 Lys Ser Asn Ser Arg Ser Arg Ser Lys Ser Gln Pro Lys Lys Glu Met
 85 90 95
 Lys Ala Lys Ser Arg Ser Arg Ser Ala Ser His Thr Lys Thr Arg Gly
 100 105 110
 Thr Ser Lys Thr Asp Ser Lys Thr His Tyr Lys Ser Gly Ser Arg Tyr
 115 120 125
 Glu Lys Glu Ser Arg Lys Lys Glu Pro Pro Arg Ser Lys Ser Gln Ser
 130 135 140
 Arg Ser Gln Ser Arg Ser Arg Ser Lys Ser Arg Ser Arg Ser Trp Thr
 145 150 155 160
 Ser Pro Lys Ser Ser Gly His

165

<210> 3741

<211> 114

<212> PRT

<213> Homo sapiens

<400> 3741

```

Met Ala Gln Gln Gly Glu Gly His His Thr His His Gln Ile Leu Leu
  1             5             10            15
Leu Val Ser Gly Phe His Ile Leu Phe Gln Ile Phe Arg Pro Ala His
      20             25            30
Ser Leu Thr Phe Pro Ser Leu Leu His Ser Ser Lys Val Glu Leu Pro
      35             40            45
Ala Ala Thr Gly Ile Ala Ala Lys Trp Glu Arg Ser Arg Val Val Arg
      50             55            60
Ala Ala Pro Asp Asn Leu Gln Arg Ala Leu Leu Glu Leu Gly Cys Ala
      65             70            75            80
Ser Leu Asn Leu Ser Tyr Tyr Met Cys Trp Val Arg Asp His Ala Tyr
      85             90            95
Leu Pro Ala Gln Glu Leu Thr Glu Glu Val Ser Lys Lys Cys Leu Leu
      100            105            110
Asp Glu

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<210> 3742

<211> 274

<212> PRT

<213> Homo sapiens

<400> 3742

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Met Lys Pro Thr Leu Leu Ala Gln Gln Glu Thr Gln Lys Ala Ala Leu
  1             5             10            15

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<210> 3743

<211> 1085

<212> PRT

<213> Homo sapiens

<400> 3743

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Met Lys Ile Gly Ser Glu Glu Leu Val Tyr Ile Thr His Ile Asp Asp
  1             5             10             15
Pro Trp Thr Phe Tyr Cys Gln Leu Ala Arg Asn Ala Asn Ile Leu Glu
      20             25             30
Glu Leu Ser Cys Ser Ile Thr Gln Leu Ser Lys Val Leu Leu Asn Leu
      35             40             45
Lys Thr Ser Pro Leu Asn Pro Gly Thr Leu Cys Leu Ala Lys Tyr Thr
      50             55             60
Asp Gly Asn Trp Tyr Arg Gly Ile Val Ile Glu Lys Glu Pro Lys Lys
      65             70             75             80
Val Phe Phe Val Asp Phe Gly Asn Ile Tyr Val Val Thr Ser Asp Asp
      85             90             95
Leu Leu Pro Ile Pro Ser Asp Ala Tyr Asp Val Leu Leu Leu Pro Met
      100            105            110
Gln Ala Val Arg Cys Ser Leu Ser Asp Ile Pro Asp His Ile Pro Glu
      115            120            125
Glu Val Val Val Trp Phe Gln Glu Thr Ile Leu Asp Lys Ser Leu Lys
      130            135            140
Ala Leu Val Val Ala Lys Asp Pro Asp Gly Thr Leu Ile Ile Glu Leu
      145            150            155            160
Tyr Gly Asp Asn Ile Gln Ile Ser Ala Ser Ile Asn Lys Lys Leu Gly
      165            170            175
Leu Leu Ser Tyr Lys Asp Arg Ile Arg Lys Lys Glu Ser Glu Val Leu
      180            185            190
Cys Ser Thr Thr Glu Thr Leu Glu Glu Lys Asn Glu Asn Met Lys Leu
      195            200            205
Pro Cys Thr Glu Tyr Leu Ser Lys Ser Val Gly Tyr Lys Leu Pro Asn
      210            215            220
Lys Glu Ile Leu Glu Glu Ser Tyr Lys Pro Gln Ile Asn Ser Ser Tyr
      225            230            235            240

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Lys Glu Leu Lys Leu Leu Gln Ser Leu Thr Lys Thr Asn Leu Val Thr
 245 250 255
 Gln Tyr Gln Asp Ser Val Gly Asn Lys Asn Ser Gln Val Phe Pro Leu
 260 265 270
 Thr Thr Glu Lys Lys Glu Glu Ile Ser Ala Glu Thr Pro Leu Lys Thr
 275 280 285
 Ala Arg Val Glu Ala Thr Leu Ser Glu Arg Lys Ile Gly Asp Ser Cys
 290 295 300
 Asp Lys Asp Leu Pro Leu Lys Phe Cys Glu Phe Pro Gln Lys Thr Ile
 305 310 315 320
 Met Pro Gly Phe Lys Thr Thr Val Tyr Val Ser His Ile Asn Asp Leu
 325 330 335
 Ser Asp Phe Tyr Val Gln Leu Ile Glu Asp Glu Ala Glu Ile Ser His
 340 345 350
 Leu Ser Glu Arg Leu Asn Ser Val Lys Thr Arg Pro Glu Tyr Tyr Val
 355 360 365
 Gly Pro Pro Leu Gln Arg Gly Asp Met Ile Cys Ala Val Phe Pro Glu
 370 375 380
 Asp Asn Leu Trp Tyr Arg Ala Val Ile Lys Glu Gln Gln Pro Asn Asp
 385 390 395 400
 Leu Leu Ser Val Gln Phe Ile Asp Tyr Gly Asn Val Ser Val Val His
 405 410 415
 Thr Asn Lys Ile Gly Arg Leu Asp Leu Val Asn Ala Ile Leu Pro Gly
 420 425 430
 Leu Cys Ile His Cys Ser Leu Gln Gly Phe Glu Val Pro Asp Asn Lys
 435 440 445
 Asn Ser Lys Lys Met Met His Tyr Phe Ser Gln Arg Thr Ser Glu Ala
 450 455 460
 Ala Ile Arg Cys Glu Phe Val Lys Phe Gln Asp Arg Trp Glu Val Ile
 465 470 475 480
 Leu Ala Asp Glu His Gly Ile Ile Ala Asp Asp Met Ile Ser Arg Tyr
 485 490 495
 Ala Leu Ser Glu Lys Ser Gln Val Glu Leu Ser Thr Gln Val Ile Lys
 500 505 510
 Ser Ala Ser Ser Lys Ser Val Asn Lys Ser Asp Ile Asp Thr Ser Val
 515 520 525

Phe Leu Asn Trp Tyr Asn Pro Glu Lys Lys Met Ile Arg Ala Tyr Ala
 530 535 540
 Thr Val Ile Asp Gly Pro Glu Tyr Phe Trp Cys Gln Phe Ala Asp Thr
 545 550 555 560
 Glu Lys Leu Gln Cys Leu Glu Val Glu Val Gln Thr Ala Gly Glu Gln
 565 570 575
 Val Ala Asp Arg Arg Asn Cys Ile Pro Cys Pro Tyr Ile Gly Asp Pro
 580 585 590
 Cys Ile Val Arg Tyr Arg Glu Asp Gly His Tyr Tyr Arg Ala Leu Ile
 595 600 605
 Thr Asn Ile Cys Glu Asp Tyr Leu Val Ser Val Arg Leu Val Asp Phe
 610 615 620
 Gly Asn Ile Glu Asp Cys Val Asp Pro Lys Ala Leu Trp Ala Ile Pro
 625 630 635 640
 Ser Glu Leu Leu Ser Val Pro Met Gln Ala Phe Pro Cys Cys Leu Ser
 645 650 655
 Gly Phe Asn Ile Ser Glu Gly Leu Cys Ser Gln Glu Gly Asn Asp Tyr
 660 665 670
 Phe Tyr Glu Ile Ile Thr Glu Asp Val Leu Glu Ile Thr Ile Leu Glu
 675 680 685
 Ile Arg Arg Asp Val Cys Asp Ile Pro Leu Ala Ile Val Asp Leu Lys
 690 695 700
 Ser Lys Gly Lys Ser Ile Asn Glu Lys Met Glu Lys Tyr Ser Lys Thr
 705 710 715 720
 Gly Ile Lys Ser Ala Leu Pro Tyr Glu Asn Ile Asp Ser Glu Ile Lys
 725 730 735
 Gln Thr Leu Gly Ser Tyr Asn Leu Asp Val Gly Leu Lys Lys Leu Ser
 740 745 750
 Asn Lys Ala Val Gln Asn Lys Ile Tyr Met Glu Gln Gln Thr Asp Glu
 755 760 765
 Leu Ala Glu Ile Thr Glu Lys Asp Val Asn Ile Ile Gly Thr Lys Pro
 770 775 780
 Ser Asn Phe Arg Asp Pro Lys Thr Asp Asn Ile Cys Glu Gly Phe Glu
 785 790 795 800
 Asn Pro Cys Lys Asp Lys Ile Asp Thr Glu Glu Leu Glu Gly Glu Leu
 805 810 815

Glu Cys His Leu Val Asp Lys Ala Glu Phe Asp Asp Lys Tyr Leu Ile
 820 825 830
 Thr Gly Phe Asn Thr Leu Leu Pro His Ala Asn Glu Thr Lys Glu Ile
 835 840 845
 Leu Glu Leu Asn Ser Leu Glu Val Pro Leu Ser Pro Asp Asp Glu Ser
 850 855 860
 Lys Glu Phe Leu Glu Leu Glu Ser Ile Glu Leu Gln Asn Ser Leu Val
 865 870 875 880

 Val Asp Glu Glu Lys Gly Glu Leu Ser Pro Val Pro Pro Asn Val Pro
 885 890 895
 Leu Ser Gln Glu Cys Val Thr Lys Gly Ala Met Glu Leu Phe Thr Leu
 900 905 910
 Gln Leu Pro Leu Ser Cys Glu Ala Glu Lys Gln Pro Glu Leu Glu Leu
 915 920 925
 Pro Thr Ala Gln Leu Pro Leu Asp Asp Lys Met Asp Pro Leu Ser Leu
 930 935 940
 Gly Val Ser Gln Lys Ala Gln Glu Ser Met Cys Thr Glu Asp Met Arg
 945 950 955 960
 Lys Ser Ser Cys Val Glu Ser Phe Asp Asp Gln Arg Arg Met Ser Leu
 965 970 975
 His Leu His Gly Ala Asp Cys Asp Pro Lys Thr Gln Asn Glu Met Asn
 980 985 990
 Ile Cys Glu Glu Glu Phe Val Glu Tyr Lys Asn Arg Asp Ala Ile Ser
 995 1000 1005
 Ala Leu Met Pro Leu Phe Ser Glu Glu Glu Ser Ser Asp Gly Ser Lys
 1010 1015 1020
 His Asn Asn Gly Leu Pro Asp His Ile Ser Ala Gln Leu Gln Asn Thr
 1025 1030 1035 1040
 Tyr Thr Leu Lys Ala Phe Thr Val Gly Ser Lys Cys Val Val Trp Ser
 1045 1050 1055
 Ser Leu Arg Asn Thr Trp Ser Lys Cys Glu Ile Leu Glu Thr Ala Glu
 1060 1065 1070
 Glu Gly Thr Arg Lys Arg Gly Leu Glu Val Met Glu Ile
 1075 1080 1085

<210> 3744

<211> 1060

<212> PRT

<213> Homo sapiens

<400> 3744

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Met Gly Asn Ser Ile Thr Tyr Arg Asp Gln Ala Ala Val Glu Asn His
  1              5              10              15
Leu Glu Gln Arg Leu His Gln Pro Gln Lys Leu Leu Glu Asp Leu Arg
      20              25              30
Lys Thr Asp Ala Gln Gln Phe Arg Thr Ala Met Lys Cys Leu Leu Glu
      35              40              45
Asp Lys Lys Asp Gly Leu Asp Leu Lys Asp Ile Ile Ile Asp Leu Gly
      50              55              60
Glu Ile Arg Glu Arg Ala Leu Gln Ser Pro Gly Val Asn Arg Ser Leu
      65              70              75              80
Phe Leu Ile Thr Leu Glu Arg Cys Phe Gln Met Leu Asn Ser Leu Glu
      85              90              95
Cys Val Glu Ile Leu Gly Lys Val Leu Arg Gly Ser Ser Gly Ser Phe
      100             105             110
Leu Gln Pro Asp Ile Thr Glu Arg Leu Pro Arg Asp Leu Arg Glu Asp
      115             120             125
Ala Phe Lys Asn Leu Ser Ala Val Phe Lys Asp Leu Tyr Asp Lys Thr
      130             135             140
Ser Ala His Ser Gln Arg Ala Leu Tyr Ser Trp Met Thr Gly Ile Leu
      145             150             155             160
Gln Thr Ser Ser Asn Ala Thr Asp Asp Ser Ala Ser Trp Val Ser Ala
      165             170             175
Glu His Leu Trp Val Leu Gly Arg Tyr Met Val His Leu Ser Phe Glu
      180             185             190
Glu Ile Thr Lys Ile Ser Pro Ile Glu Ile Gly Leu Phe Ile Ser Tyr
      195             200             205
Asp Asn Ala Thr Lys Gln Leu Asp Met Val Tyr Asp Ile Thr Pro Glu
      210             215             220
Leu Ala Gln Ala Phe Leu Glu Arg Ile Ser Ser Ser Asn Phe Asn Met

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225 230 235 240
 Arg Asn Thr Ser Thr Ile His Arg Leu Gly Leu Leu Val Cys Phe Tyr
 245 250 255
 Asn Asp Leu Glu Leu Leu Asp Ala Thr Val Ala Gln Val Leu Leu Tyr
 260 265 270
 Gln Met Ile Lys Cys Ser His Leu Arg Gly Phe Gln Ala Gly Val Gln
 275 280 285
 Lys Leu Lys Ala Glu Leu Leu Asp Ile Ala Met Glu Asn Gln Thr Leu
 290 295 300
 Asn Glu Thr Leu Gly Ser Leu Ser Asp Ala Val Val Gly Leu Thr Tyr
 305 310 315 320
 Ser Gln Leu Glu Ser Leu Ser Pro Glu Ala Val His Gly Ala Ile Ser
 325 330 335
 Thr Leu Asn Gln Val Ser Gly Trp Ala Lys Ser Gln Val Ile Ile Leu
 340 345 350
 Ser Ala Lys Tyr Leu Ala His Glu Lys Val Leu Ser Phe Tyr Asn Val
 355 360 365
 Ser Gln Met Gly Ala Leu Leu Ala Gly Val Ser Thr Gln Ala Phe Cys
 370 375 380
 Ser Met Lys Arg Lys Asp Ile Ser Gln Val Leu Arg Ser Ala Val Ser
 385 390 395 400
 Gln Tyr Val Ser Asp Leu Ser Pro Ala Gln Gln Gln Gly Ile Leu Ser
 405 410 415
 Lys Met Val Gln Ala Glu Asp Thr Ala Pro Gly Ile Val Glu Ile Gln
 420 425 430
 Gly Ala Phe Phe Lys Glu Val Ser Leu Phe Asp Leu Arg Arg Gln Pro
 435 440 445
 Gly Phe Asn Ser Thr Val Leu Lys Asp Lys Glu Leu Gly Arg Ser Gln
 450 455 460
 Ala Leu Phe Leu Tyr Glu Leu Leu Leu Lys Thr Thr Arg Arg Pro Glu
 465 470 475 480
 Glu Leu Leu Ser Ala Gly Gln Leu Val Lys Gly Val Thr Cys Ser His
 485 490 495
 Ile Asp Ala Met Ser Thr Asp Phe Phe Leu Ala His Phe Gln Asp Phe
 500 505 510
 Gln Asn Asn Phe Ala Leu Leu Ser Pro Tyr Gln Val Asn Cys Leu Ala

515	520	525
Trp Lys Tyr Trp Glu Val Ser Arg Leu Ser Met Pro Pro Phe Leu Leu		
530	535	540
Ala Ala Leu Pro Ala Arg Tyr Leu Ala Ser Val Pro Ala Ser Gln Cys		
545	550	555
Val Pro Phe Leu Ile Ser Leu Gly Lys Ser Trp Leu Asp Ser Leu Val		
565	570	575
Leu Asp Ser His Lys Lys Thr Ser Val Leu Arg Lys Val Gln Gln Cys		
580	585	590
Leu Asp Asp Ser Ile Ala Asp Glu Tyr Thr Val Asp Ile Met Gly Asn		
595	600	605
Leu Leu Cys His Leu Pro Ala Ala Ile Ile Asp Arg Gly Ile Ser Pro		
610	615	620
Arg Ala Trp Ala Thr Ala Leu His Gly Leu Arg Asp Cys Pro Asp Leu		
625	630	635
Asn Pro Glu Gln Lys Ala Ala Val Arg Leu Lys Leu Leu Gly Gln Tyr		
645	650	655
Gly Leu Pro Gln His Trp Thr Ala Glu Thr Thr Lys Asp Leu Gly Pro		
660	665	670
Phe Leu Val Leu Phe Ser Gly Asp Glu Leu Ser Ser Ile Ala Thr Lys		
675	680	685
Phe Pro Glu Ile Leu Leu Gln Ala Ala Ser Lys Met Ala Arg Thr Leu		
690	695	700
Pro Thr Lys Glu Phe Leu Trp Ala Val Phe Gln Ser Val Arg Asn Ser		
705	710	715
Ser Asp Lys Ile Pro Ser Tyr Asp Pro Met Pro Gly Cys His Gly Val		
725	730	735
Val Ala Pro Ser Ser Asp Asp Ile Phe Lys Leu Ala Glu Ala Asn Ala		
740	745	750
Cys Trp Ala Leu Glu Asp Leu Arg Cys Met Glu Glu Asp Thr Phe Ile		
755	760	765
Arg Thr Val Glu Leu Leu Gly Ala Val Gln Gly Phe Ser Arg Pro Gln		
770	775	780
Leu Met Thr Leu Lys Glu Lys Ala Ile Gln Val Trp Asp Met Pro Ser		
785	790	795
Tyr Trp Arg Glu His His Ile Val Ser Leu Gly Arg Ile Ala Leu Ala		

	805		810		815										
Leu	Asn	Glu	Ser	Glu	Leu	Glu	Gln	Leu	Asp	Leu	Ser	Ser	Ile	Asp	Thr
	820				825					830					
Val	Ala	Ser	Leu	Ser	Trp	Gln	Thr	Glu	Trp	Thr	Pro	Gly	Gln	Ala	Glu
	835				840					845					
Ser	Ile	Leu	Gln	Gly	Tyr	Leu	Asp	Asp	Ser	Gly	Tyr	Ser	Ile	Gln	Asp
	850				855					860					
Leu	Lys	Ser	Phe	His	Leu	Val	Gly	Leu	Gly	Ala	Thr	Leu	Cys	Ala	Ile
865				870						875					880
Asn	Ile	Thr	Glu	Ile	Pro	Leu	Ile	Lys	Ile	Ser	Glu	Phe	Arg	Val	Val
			885					890						895	
Val	Ala	Arg	Ile	Gly	Thr	Leu	Leu	Cys	Ser	Thr	His	Val	Leu	Ala	Glu
	900							905					910		
Phe	Lys	Arg	Lys	Ala	Glu	Val	Val	Phe	Gly	Asp	Pro	Thr	Glu	Trp	Thr
	915							920					925		
Ser	Ser	Val	Leu	Gln	Glu	Leu	Gly	Thr	Ile	Ala	Ala	Gly	Leu	Thr	Lys
	930							935					940		
Ala	Glu	Leu	Arg	Met	Leu	Asp	Lys	Asp	Leu	Met	Pro	Tyr	Phe	Gln	Pro
945				950						955					960
Ser	Ala	Ile	Lys	Cys	Leu	Pro	Asp	Glu	Ile	Phe	Lys	Glu	Leu	Ser	Ala
			965							970				975	
Glu	Gln	Ile	Ala	Ser	Leu	Gly	Pro	Glu	Asn	Ala	Ala	Ala	Val	Thr	His
	980								985				990		
Ala	Gln	Arg	Arg	Arg	Leu	Ser	Pro	Leu	Gln	Leu	Gln	Ser	Leu	Gln	Gln
	995						1000						1005		
Ala	Leu	Asp	Gly	Ala	Lys	Thr	His	Ser	Trp	Gln	Asp	Ala	Pro	Ala	Ser
	1010						1015						1020		
Ala	Gly	Pro	Thr	Arg	Thr	Ser	Ser	Ser	Arg	Ser	Pro	Ala	Gly	Ala	Leu
1025				1030						1035					1040
Gln	Ser	Trp	Gly	Leu	Trp	Leu	Gly	Cys	Pro	Leu	Leu	Val	Leu	Met	Ala
			1045						1050					1055	
Lys	Leu	Leu	Trp												
	1060														

<211> 108

<212> PRT

<213> Homo sapiens

<400> 3745

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Met Gly Lys Asn Val Ser Lys Ala Val Glu His Ile Asn Lys Thr Ile
  1             5             10            15
Glu Pro Ala Leu Ile Ser Lys His Leu Asn Val Ile Glu Gln Lys Arg
          20           25           30
Ile Asp Lys Leu Met Ile Glu Thr Val Asp Pro Asp Asn Arg Ser Lys
        35           40           45
Phe Gly Val Asn Ile Ile Leu Gly Ile Ser Phe Ala Val Cys Lys Ala
        50           55           60
Gly Ala Ala Glu Lys Gly Phe Ser Leu Leu Ser Gln Asn Cys Glu Phe
        65           70           75           80
Ala Gly Asn Ser Glu Gly Ile Leu Leu Val Pro Ala Phe Thr Val Thr
          85           90           95
Ser Asn Gly Ser Gln Ser Gly Asn Lys Leu Ala Val
        100          105

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<210> 3746

<211> 1557

<212> PRT

<213> Homo sapiens

<400> 3746

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Met Gln Asn Ile Pro Phe Pro Ser Pro Gln Arg Pro Arg Ile Leu Val
  1             5             10            15
Gln Leu Ser Val His Asp Ala Leu Ile Leu Ser Gln Pro Val Ser Thr
          20           25           30
Pro Leu Pro Leu Ser Gly Ala Asn Phe Ser Thr Leu Leu Met Asn Leu
        35           40           45
Gly Pro Glu Asn Cys Ala Thr Leu Leu Leu Phe Val Leu Leu Glu Ser
        50           55           60
Lys Ile Leu Leu His Ser Leu Arg Pro Ala Val Leu Thr Gly Val Ala

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65	70	75	80
Glu Ala Val Val Ala Met Ile Phe Pro Phe Gln Trp Gln Cys Pro Tyr			
	85	90	95
Ile Pro Leu Cys Pro Leu Ser Leu Ala Ala Val Leu Ser Ala Pro Leu			
	100	105	110
Pro Phe Ile Val Gly Val Asp Ser Arg Tyr Phe Asp Leu His Asp Pro			
	115	120	125
Pro Gln Asp Val Val Cys Ile Asp Leu Asp Thr Asn Met Leu Tyr Val			
	130	135	140
Ser Asp Glu Lys Lys Asn Met Asn Trp Lys Gln Leu Pro Lys Lys Pro			
145	150	155	160
Cys Lys Asn Leu Leu Ser Thr Leu Lys Lys Leu Tyr Pro Gln Leu Ser			
	165	170	175
Ser Val His Gln Lys Thr Gln Glu Gly Ser Ala Ile Asp Met Thr Pro			
	180	185	190
Ile Glu Ala Asp Phe Ser Trp Gln Lys Lys Met Thr Gln Leu Glu Met			
	195	200	205
Glu Ile Gln Glu Ala Phe Leu Arg Phe Met Ala Ser Ile Leu Lys Gly			
	210	215	220
Tyr Arg Thr Tyr Leu Arg Pro Ile Thr Glu Ala Pro Ser Asn Lys Ala			
225	230	235	240
Thr Ala Ala Asp Ser Leu Phe Asp Arg Gln Gly Phe Leu Lys Ser Arg			
	245	250	255
Asp Arg Ala Tyr Ala Lys Phe Tyr Thr Leu Leu Ser Lys Thr Gln Ile			
	260	265	270
Phe Ile Arg Phe Ile Glu Glu Cys Ser Phe Val Ser Asp Lys Asp Thr			
	275	280	285
Gly Leu Ala Phe Phe Asp Asp Cys Ile Glu Lys Leu Phe Pro Asp Lys			
	290	295	300
Gly Thr Glu Lys Thr Asp Lys Val Asp Phe Asp Ser Ala Glu Asp Thr			
305	310	315	320
Arg Leu Ile Glu Leu Asp Asp Ser Gln Lys Gly Glu His Thr Val Phe			
	325	330	335
Ile Met Pro Pro Glu Pro Pro Pro Asp Asp Gly Lys Asp Leu Ser Pro			
	340	345	350
Lys Tyr Ser Tyr Lys Tyr Phe Pro Arg Leu Asp Leu Lys Leu Phe Asp			

355	360	365
Arg Pro Gln Glu Leu Lys	Leu Cys Phe Ser Arg His	Pro Thr Gly Asn
370	375	380
Ser Ile Thr Lys Ser Pro	Pro Leu Met Ala Lys Arg	Thr Lys Gln Glu
385	390	395
Ile Lys Thr Ala His Lys	Leu Ala Lys Arg Cys Tyr	Thr Asn Pro Pro
405	410	415
Gln Trp Ala Lys Cys Leu	Phe Ser His Cys Tyr Ser	Leu Trp Phe Ile
420	425	430
Cys Leu Pro Ala Tyr Val	Arg Val Ser His Pro Lys	Val Arg Ala Leu
435	440	445
Gln Gln Ala Tyr Asp Val	Leu Ile Lys Met Arg Lys	Thr Asp Val Asp
450	455	460
Pro Leu Asp Glu Val Cys	Tyr Arg Val Val Met Gln	Leu Cys Gly Leu
465	470	475
Trp Gly His Pro Val Leu	Ala Val Arg Val Leu Phe	Glu Met Lys Thr
485	490	495
Ala Arg Ile Lys Pro Asn	Ala Ile Thr Tyr Gly Tyr	Tyr Asn Lys Val
500	505	510
Val Leu Glu Ser Pro Trp	Pro Ser Ser Thr Arg Ser	Gly Ile Phe Leu
515	520	525
Trp Thr Lys Val Arg Asn	Val Val Arg Gly Leu Ala	Gln Phe Arg Gln
530	535	540
Pro Leu Lys Lys Thr Val	Gln Arg Ser Gln Val Ser	Ser Ile Ser Gly
545	550	555
Gly Gln Ser Asp Gln Gly	Tyr Gly Ser Lys Asp Glu	Leu Ile Lys Asp
565	570	575
Asp Ala Glu Ile His Val	Pro Glu Glu Gln Ala Ala	Arg Glu Leu Ile
580	585	590
Thr Lys Thr Lys Met Gln	Thr Glu Glu Val Cys Asp	Ala Ser Ala Ile
595	600	605
Val Ala Lys His Ser Gln	Pro Ser Pro Glu Pro His	Ser Pro Thr Glu
610	615	620
Pro Pro Ala Trp Gly Ser	Ser Ile Val Lys Val Pro	Ser Gly Ile Phe
625	630	635
Asp Val Asn Ser Arg Lys	Ser Ser Thr Gly Ser Ile	Ser Asn Val Leu

	645		650		655
Phe Ser Thr	Gln Asp Pro Val Glu Asp Ala Val Phe Gly Glu Ala Thr				
	660		665		670
Asn Leu Lys Lys Asn Gly Asp Arg Gly Glu Lys Arg Gln Lys His Phe					
	675		680		685
Pro Glu Arg Ser Cys Ser Phe Ser Ser Glu Ser Arg Ala Gly Met Leu					
	690		695		700
Leu Lys Lys Ser Ser Leu Asp Ser Asn Ser Ser Glu Met Ala Ile Met					
705		710		715	720
Met Gly Ala Asp Ala Lys Ile Leu Thr Ala Ala Leu Thr Cys Pro Lys					
	725		730		735
Thr Ser Leu Leu His Ile Ala Arg Thr His Ser Phe Glu Asn Val Ser					
	740		745		750
Cys His Leu Pro Asp Ser Arg Thr Cys Met Ser Glu Ser Thr Trp Asn					
	755		760		765
Pro Glu His Arg Ser Ser Pro Val Pro Glu Met Leu Glu Glu Ser Gln					
	770		775		780
Glu Leu Leu Glu Pro Val Val Asp Asp Val Pro Lys Thr Thr Ala Thr					
785		790		795	800
Val Asp Thr Tyr Glu Ser Leu Leu Ser Asp Ser Asn Ser Asn Gln Ser					
	805		810		815
Arg Asp Leu Lys Thr Val Ser Lys Asp Leu Arg Asn Lys Arg Ser Ser					
	820		825		830
Leu Tyr Gly Ile Ala Lys Val Val Gln Arg Glu Asp Val Glu Thr Gly					
	835		840		845
Leu Asp Pro Leu Ser Leu Leu Ala Thr Glu Cys Thr Gly Gly Lys Thr					
	850		855		860
Pro Asp Ser Glu Asp Lys Leu Phe Ser Pro Val Ile Ala Arg Asn Leu					
865		870		875	880
Ala Asp Glu Ile Glu Ser Tyr Met Asn Leu Lys Ser Pro Leu Gly Ser					
	885		890		895
Lys Ser Ser Ser Met Glu Leu His Arg Glu Glu Asn Arg Glu Ser Gly					
	900		905		910
Met Thr Thr Ala Phe Ile His Ala Leu Glu Arg Arg Ser Ser Leu Pro					
	915		920		925
Leu Asp His Gly Ser Pro Ala Gln Glu Asn Pro Glu Ser Glu Lys Ser					

930	935	940	
Ser Pro Ala Val Ser Arg Ser Lys Thr Phe Thr Gly Arg Phe Lys Gln			
945	950	955	960
Gln Thr Pro Ser Arg Thr His Lys Glu Arg Ser Thr Ser Leu Ser Ala			
	965	970	975
Leu Val Arg Ser Ser Pro His Gly Ser Leu Gly Ser Val Val Asn Ser			
	980	985	990
Leu Ser Gly Leu Lys Leu Asp Asn Ile Leu Ser Gly Pro Lys Ile Asp			
	995	1000	1005
Val Leu Lys Ser Gly Met Lys Gln Ala Ala Thr Val Ala Ser Lys Met			
1010	1015	1020	
Trp Val Ala Val Ala Ser Ala Tyr Ser Tyr Ser Asp Asp Glu Glu Glu			
1025	1030	1035	1040
Thr Asn Arg Asp Tyr Ser Phe Pro Ala Gly Leu Glu Asp His Ile Leu			
	1045	1050	1055
Gly Glu Asn Ile Ser Pro Asn Thr Ser Ile Ser Gly Leu Val Pro Ser			
	1060	1065	1070
Glu Leu Thr Gln Ser Asn Thr Ser Leu Gly Ser Ser Ser Ser Ser Gly			
	1075	1080	1085
Asp Val Gly Lys Leu His Tyr Pro Thr Gly Glu Val Pro Phe Pro Arg			
1090	1095	1100	
Gly Met Lys Gly Gln Asp Phe Glu Lys Ser Asp His Gly Ser Ser Gln			
1105	1110	1115	1120
Asn Thr Ser Met Ser Ser Ile Tyr Gln Asn Cys Ala Met Glu Val Leu			
	1125	1130	1135
Met Ser Ser Cys Ser Gln Cys Arg Ala Cys Gly Ala Leu Val Tyr Asp			
	1140	1145	1150
Glu Glu Ile Met Ala Gly Trp Thr Ala Asp Asp Ser Asn Leu Asn Thr			
	1155	1160	1165
Ala Cys Pro Phe Cys Lys Ser Asn Phe Leu Pro Leu Leu Asn Ile Glu			
1170	1175	1180	
Phe Lys Asp Leu Arg Gly Ser Ala Ser Phe Phe Leu Lys Pro Ser Thr			
1185	1190	1195	1200
Ser Gly Asp Ser Leu Gln Ser Gly Ser Ile Pro Leu Ala Asn Glu Ser			
	1205	1210	1215

Leu Glu His Lys Pro Val Ser Ser Leu Ala Glu Pro Asp Leu Ile Asn
 1220 1225 1230
 Phe Met Asp Phe Pro Lys His Asn Gln Ile Ile Thr Glu Glu Thr Gly
 1235 1240 1245
 Ser Ala Val Glu Pro Ser Asp Glu Ile Lys Arg Ala Ser Gly Asp Val
 1250 1255 1260
 Gln Thr Met Lys Ile Ser Ser Val Pro Asn Ser Leu Ser Lys Arg Asn
 1265 1270 1275 1280
 Val Ser Leu Thr Arg Ser His Ser Val Gly Gly Pro Leu Gln Asn Ile
 1285 1290 1295
 Asp Phe Thr Gln Arg Pro Phe His Gly Ile Ser Thr Val Ser Leu Pro
 1300 1305 1310
 Asn Ser Leu Gln Glu Val Val Asp Pro Leu Gly Lys Arg Pro Asn Pro
 1315 1320 1325
 Pro Pro Val Ser Val Pro Tyr Leu Ser Pro Leu Val Leu Arg Lys Glu
 1330 1335 1340
 Leu Glu Ser Leu Leu Glu Asn Glu Gly Asp Gln Val Ile His Thr Ser
 1345 1350 1355 1360
 Ser Phe Ile Asn Gln His Pro Ile Ile Phe Trp Asn Leu Val Trp Tyr
 1365 1370 1375
 Phe Arg Arg Leu Asp Leu Pro Ser Asn Leu Pro Gly Leu Ile Leu Thr
 1380 1385 1390
 Ser Glu His Cys Asn Glu Gly Val Gln Leu Pro Leu Ser Ser Leu Ser
 1395 1400 1405
 Gln Asp Ser Lys Leu Val Tyr Ile Gln Leu Leu Trp Asp Asn Ile Asn
 1410 1415 1420
 Leu His Gln Glu Pro Arg Glu Pro Leu Tyr Val Ser Trp Arg Asn Phe
 1425 1430 1435 1440
 Asn Ser Glu Lys Lys Ser Ser Leu Leu Ser Glu Glu Gln Gln Glu Thr
 1445 1450 1455
 Ser Thr Leu Val Glu Thr Ile Arg Gln Ser Ile Gln His Asn Asn Val
 1460 1465 1470
 Leu Lys Pro Ile Asn Leu Leu Ser Gln Gln Met Lys Pro Gly Met Lys
 1475 1480 1485
 Arg Gln Arg Ser Leu Tyr Arg Glu Ile Leu Phe Leu Ser Leu Val Ser
 1490 1495 1500

Leu Gly Arg Glu Asn Ile Asp Ile Glu Ala Phe Asp Asn Glu Tyr Gly
 1505 1510 1515 1520
 Ile Ala Tyr Asn Ser Leu Ser Ser Glu Ile Leu Glu Arg Leu Gln Lys
 1525 1530 1535
 Ile Asp Ala Pro Pro Ser Ala Ser Val Glu Trp Cys Arg Lys Cys Phe
 1540 1545 1550
 Gly Ala Pro Leu Ile
 1555

<210> 3747

<211> 288

<212> PRT

<213> Homo sapiens

<400> 3747

Met Tyr Val Phe Gln Leu Phe Asp Tyr Tyr Ser Ala Ser Gly Thr Thr
 1 5 10 15
 Leu Leu Trp Gln Ala Phe Trp Glu Cys Val Val Val Val Trp Val Tyr
 20 25 30
 Gly Ala Asp Arg Phe Thr Asp Asp Ile Ala Cys Met Ile Gly Tyr Arg
 35 40 45
 Pro Cys Pro Trp Met Lys Trp Cys Trp Ser Phe Phe Thr Pro Leu Val
 50 55 60
 Cys Met Gly Ile Phe Ile Phe Asn Val Val Tyr Tyr Lys Pro Leu Val
 65 70 75 80
 Tyr Lys Asn Thr Asn Val Tyr Pro Trp Trp Gly Glu Ala Met Gly Trp
 85 90 95
 Ala Phe Val Leu Ser Ser Met Leu Cys Met Pro Leu His Leu Leu Gly
 100 105 110
 Cys Leu Leu Arg Ala Lys Gly Thr Met Ala Glu Cys Trp Lys His Leu
 115 120 125
 Thr Gln Pro Ile Trp Gly Leu His His Leu Glu Tyr Arg Ala Gln Asp
 130 135 140
 Ala Asp Val Arg Gly Leu Thr Thr Leu Thr Pro Val Ser Glu Ser Ser
 145 150 155 160

Lys Val Val Val Val Glu Ser Val Met Gly Gln Leu Ser Ser His His
 165 170 175
 Gln Leu Thr Ser Gly Leu Trp Gly Lys Arg Leu Gln Tyr Ser Ile Leu
 180 185 190
 Gly Val Trp Ala Ala Asn Leu Ala Cys Ser Gly Phe Pro Pro Cys Ala
 195 200 205
 Leu Gly Trp Ala His Pro Arg Glu Gly Thr Pro Asp Thr Ala Pro Thr
 210 215 220
 Ser Arg Leu Lys Ala Asp Ala Leu Pro Ala Pro Pro Val Phe Cys Val
 225 230 235 240
 Ala Ala Leu Thr His Val Cys Leu Ser Arg Pro Val Pro Arg Arg Leu
 245 250 255
 Ser Asp Pro Lys Lys Gly Phe Pro Asp Thr Arg Thr Glu Ala Gly Gly
 260 265 270
 Leu Gly Leu Gly Glu Gly Gly Gly Pro Ala Gly Thr Phe Leu Leu Cys
 275 280 285

<210> 3748

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3748

Met Val Ser Val Phe Arg Ser Cys Asp Leu Pro Thr Leu Ala Ser Gln
 1 5 10 15
 Arg Ala Gly Ile Ile Gly Val Ser His Cys Ala Arg Pro Thr Val Arg
 20 25 30
 Phe Phe Leu Phe Leu Phe Phe Phe Phe Glu Met Glu Ser Ser Ser Val
 35 40 45
 Thr Arg Leu Glu Cys Ser Asp Val Ile Ser Ala His His Asn Leu Arg
 50 55 60
 Pro Pro Gly Ser Ser Asp Ser Pro Ala Leu Asp Ser Gln Val Ala Arg
 65 70 75 80
 Ile Thr Gly Met Arg His His Thr Gln Leu Ile Phe Val Phe Leu Val
 85 90 95

Glu Thr Gly Phe His His Ile Gly Gln Asp Gly Leu His Leu Leu Thr
 100 105 110
 Ser

<210> 3749

<211> 1445

<212> PRT

<213> Homo sapiens

<400> 3749

Met Gly Asn Leu Val Ile Pro Leu Gly Lys Gly Arg Ala Gly Arg Val
 1 5 10 15
 Glu Ser Gly Gln Arg Ile Pro Pro Pro Ala Pro Arg Pro Ser Val Glu
 20 25 30
 Cys Thr Gly Asp Asp Ile Ala Leu Gln Met Glu Lys Met Leu Phe Pro
 35 40 45
 Leu Lys Ser Pro Ser Ala Thr Trp Leu Ser Pro Ser Ser Thr Pro Trp
 50 55 60
 Met Met Asp Phe Ile Leu Thr Ser Val Cys Gly Leu Val Leu Leu Phe
 65 70 75 80
 Leu Leu Leu Leu Tyr Val His Ser Asp Pro Pro Ser Pro Pro Pro Gly
 85 90 95
 Arg Lys Arg Ser Ser Arg Glu Pro Gln Arg Glu Arg Ser Gly Arg Ser
 100 105 110
 Arg Ser Arg Lys Ile Ser Ala Leu Lys Ala Cys Arg Ile Leu Leu Arg
 115 120 125
 Glu Leu Glu Glu Thr Arg Asp Leu Asn Tyr Leu Leu Glu Ser His Leu
 130 135 140
 Arg Lys Leu Ala Gly Glu Gly Ser Ser His Leu Pro Leu Gly Gly Asp
 145 150 155 160
 Pro Leu Gly Asp Val Cys Lys Pro Val Pro Ala Lys Ala His Gln Pro
 165 170 175
 His Gly Lys Cys Met Gln Asp Pro Ser Pro Ala Ser Leu Ser Pro Pro
 180 185 190

Ala Pro Pro Ala Pro Leu Ala Ser Thr Leu Ser Pro Gly Pro Met Thr
 195 200 205
 Phe Ser Glu Pro Phe Gly Pro His Ser Thr Leu Ser Ala Ser Gly Pro
 210 215 220
 Pro Glu Pro Leu Leu Pro Leu Lys Cys Pro Ala Thr Gln Pro His Val
 225 230 235 240
 Val Phe Pro Pro Ser Pro Gln Pro His Gly Pro Leu Ala Ser Ser Pro
 245 250 255
 Pro Pro Pro Asp Ser Ser Leu Ala Gly Leu Gln Cys Gly Ser Thr Thr
 260 265 270
 Cys Pro Val Pro Gln Ser Ser Pro Leu His Asn Gln Val Leu Pro Pro
 275 280 285
 Pro Thr Arg Val Ile Ser Gly Leu Gly Cys Ser Ser Asp Pro Ile Trp
 290 295 300
 Asp Leu Tyr Cys Trp Arg Glu Ala Ala Thr Thr Trp Gly Leu Ser Thr
 305 310 315 320
 Tyr Ser His Gly Lys Ser Gln Pro Arg His Leu Pro Asp His Pro Ser
 325 330 335
 Glu Ala Ser Phe Trp Gly Asp Pro Thr Pro Lys His Met Glu Val Gly
 340 345 350
 Gly Cys Thr Phe Ile His Pro Asp Val Gln Lys Leu Leu Glu Thr Leu
 355 360 365
 Ile Ala Lys Arg Ala Leu Met Lys Met Trp Gln Glu Lys Glu Arg Lys
 370 375 380
 Arg Ala Asp His Pro His Met Thr Ser Leu Gly Lys Glu Trp Asp Ile
 385 390 395 400
 Thr Thr Leu Asn Pro Phe Trp Asn Val Ser Thr Gln Pro Gln Gln Leu
 405 410 415
 Pro Arg Pro Gln Gln Val Ser Asp Ala Thr Thr Val Gly Asn His Leu
 420 425 430
 Gln Gln Lys Arg Ser Gln Leu Phe Trp Asp Leu Pro Ser Leu Asn Ser
 435 440 445
 Glu Ser Leu Ala Thr Thr Val Trp Val Ser Arg Asn Pro Ser Ser Gln
 450 455 460
 Asn Ala His Ser Val Pro Leu Asp Lys Ala Ser Thr Ser Leu Pro Gly
 465 470 475 480

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Leu Ala Arg Lys Val Gly Glu Ile Lys Glu Gly Trp Ile Pro Met Pro
 770 775 780
 Val Arg Arg Ser Trp Leu Met Ala Lys Cys Ala Val Pro Lys Ser Asp
 785 790 795 800
 Thr His Arg Lys Pro Glu Lys Leu Ala Ser Trp Arg Gly Gly Lys Ala
 805 810 815
 His Val Asn Thr Ser Gln Glu Leu Ser Phe Leu His Pro Cys Thr Gln
 820 825 830
 Gln Ile Leu Glu Val His Leu Val Arg Phe Cys Val Arg His Ser Trp
 835 840 845
 Gly Thr Asp Leu Gln Ser Leu Glu Pro Ile Asn Val Trp Ser Gly Glu
 850 855 860
 Ala Gln Ala Pro Pro Phe Pro Gln Ser Thr Phe Thr Pro Trp Ala Ser
 865 870 875 880
 Trp Val Ser Arg Val Glu Ser Val Pro Lys Val Pro Ile Phe Leu Gly
 885 890 895
 Lys Arg Pro Gln Ser Gly Pro Gly Asp Asn Arg Thr Thr Ser Lys Ser
 900 905 910
 Val Pro Thr Val Ser Gly Pro Leu Ala Ala Pro Pro Pro Glu Gln Glu
 915 920 925
 Gly Val Gln Arg Pro Pro Arg Gly Ser Gln Ser Ala Asp Thr His Gly
 930 935 940
 Arg Ser Glu Ala Phe Pro Thr Gly His Lys Gly Arg Gly Cys Ser Gln
 945 950 955 960
 Pro Pro Thr Cys Ser Leu Val Gly Arg Thr Trp Gln Ser Arg Thr Val
 965 970 975
 Leu Glu Ser Gly Lys Pro Lys Pro Arg Leu Glu Gly Ser Met Gly Ser
 980 985 990
 Glu Met Ala Gly Asn Glu Ala Trp Leu Glu Ser Glu Ser Met Ser Pro
 995 1000 1005
 Gly Asp Pro Cys Ser Ser Arg Ala Leu Gln Glu Leu Ser Ile Gly Ser
 1010 1015 1020
 Gln Trp Ala Arg Ala Glu Asp Ala Leu Gln Ala Leu Lys Val Gly Glu
 1025 1030 1035 1040
 Lys Pro Pro Thr Trp Glu Val Thr Leu Gly Ala Ser Val Arg Ala Ser
 1045 1050 1055

Ser Gly Ser Val Gln Glu Asp Leu Arg Ser Thr Gly Ala Leu Gly Thr
 1060 1065 1070
 Thr Gly Asn Pro Ser Ala Ser Ser Val Cys Val Ala Gln Asp Pro Glu
 1075 1080 1085
 Gln Leu His Leu Lys Ala Gln Val Val Ser Glu Ile Ala Leu Ile Val
 1090 1095 1100
 Gln Val Asp Ser Glu Glu Gln Leu Pro Gly Arg Ala Pro Gly Ile Leu
 1105 1110 1115 1120
 Leu Gln Asp Gly Ala Thr Gly Leu Cys Leu Pro Gly Arg His Met Asp
 1125 1130 1135
 Met Leu Thr Ala Ala Asp Arg Leu Pro Thr Gln Ala Pro Leu Ser Thr
 1140 1145 1150
 Ser Gln Ser Val Ser Gly Lys Asn Met Thr Ala Ser Gln Gly Pro Cys
 1155 1160 1165
 Ala Leu Leu Trp Lys Gly Gly Asp Ser Pro Gly Gln Gln Glu Pro Gly
 1170 1175 1180
 Ser Pro Lys Ala Lys Ala Pro Gln Lys Ser Gln Lys Thr Leu Gly Cys
 1185 1190 1195 1200
 Ala Gly Lys Gly Glu Ala His Arg Arg Pro Arg Thr Gly Glu Gln Gly
 1205 1210 1215
 His Arg Ser Lys Gly Pro Arg Thr Ser Glu Ala Ser Gly Arg Ser His
 1220 1225 1230
 Pro Ala Gln Ala Arg Glu Ile Gly Asp Lys Gln Glu Arg Lys Tyr Asn
 1235 1240 1245
 Gln Leu Gln Leu Glu Lys Gly Gln Thr Pro Pro Glu Ser His Phe Gln
 1250 1255 1260
 Arg Lys Ile Ser His His Pro Gln Gly Leu His Pro Arg Lys Gly Gly
 1265 1270 1275 1280
 Thr Arg Trp Glu Asp Val Leu Gln Lys Gly Lys Pro Gly Ala Asp Ala
 1285 1290 1295
 Phe Gln Ser Trp Gly Ser Gly Pro Pro Arg Gln Phe Met Asp Cys Met
 1300 1305 1310
 Ala Asp Lys Ala Trp Thr Ile Ser Arg Val Val Gly Gln Ile Leu Val
 1315 1320 1325
 Asp Lys Leu Gly Leu Gln Trp Gly Arg Gly Pro Ser Glu Val Asn Arg
 1330 1335 1340

His Lys Gly Asp Phe His Ala Gln Glu Asn Val Pro Ser Cys Cys His
 1345 1350 1355 1360
 Arg Gly His Cys His Gln Glu Arg Ser Arg Glu Met Arg Ala Leu Ala
 1365 1370 1375
 Cys Ser Pro Lys Ala Thr Pro Lys Gly His His Cys Pro Val Lys Asn
 1380 1385 1390
 Arg Gly Ile Arg Asp Arg Asp Ser Ser Trp Ala Pro Pro Pro Arg Glu
 1395 1400 1405
 Pro Val Ser Pro Ala Gly Pro His His His Arg Pro Arg Met Ala Ser
 1410 1415 1420
 Thr Ser Gly Gly Pro His Pro Gln Leu Gln Glu Leu Met Ser Ala Gln
 1425 1430 1435 1440
 Arg Cys Leu Ala Ser
 1445

<210> 3750

<211> 138

<212> PRT

<213> Homo sapiens

<400> 3750

Met Gln Leu Leu Ala Gly Val Lys Leu Cys Thr Gly Arg Thr Leu Thr
 1 5 10 15
 Asn His Pro His Tyr Glu Asp Ser Ser Leu Arg Glu Arg Thr Arg Ala
 20 25 30
 Val Tyr Gln Ile Tyr Ala Lys Arg Ala Pro Glu Glu Val His Ala Leu
 35 40 45
 Leu Arg Ser Phe Gly Thr Asp Tyr Val Ile Leu Glu Asp Ser Ile Cys
 50 55 60
 Tyr Glu Arg Arg His Arg Arg Gly Cys Arg Leu Arg Asp Leu Leu Asp
 65 70 75 80
 Ile Ala Asn Gly His Met Met Asp Gly Pro Gly Glu Asn Asp Pro Asp
 85 90 95
 Leu Lys Pro Ala Asp His Pro Arg Phe Cys Glu Glu Ile Lys Arg Asn
 100 105 110

Leu Pro Pro Tyr Val Ala Tyr Phe Thr Arg Val Phe Gln Asn Lys Thr
 115 120 125

Phe His Val Tyr Lys Leu Ser Arg Asn Lys
 130 135

<210> 3751

<211> 917

<212> PRT

<213> Homo sapiens

<400> 3751

Met Glu Asn Ile Leu Cys Phe Leu Asn Ser Tyr Thr Glu Thr Val Leu
 1 5 10 15
 Ser Pro Asp Ser His Cys Leu Asp Ile Asp Leu Asn Phe Ile Cys Leu
 20 25 30
 Ser Gly Leu Gly Leu Phe Ile Leu Tyr Leu Phe Tyr Met Val Leu Thr
 35 40 45
 Leu Tyr Ser Ser Pro Thr Glu Lys Asn Asn Asp Thr Gln Lys His Gln
 50 55 60
 Gly Arg Ala Arg Arg Lys Arg Lys Ser Val Thr Phe Lys Asp Arg Lys
 65 70 75 80
 Ser Leu Gln Lys Glu Ala Glu Glu Glu Arg Lys Leu His Ser Phe Leu
 85 90 95
 Lys Ser Phe Gly Pro Pro Val Ser Cys Ser Pro Leu Gly Gln His His
 100 105 110
 Asp Thr Thr Leu Phe Arg Arg Leu Leu Cys Pro Asp Pro Val Cys Arg
 115 120 125
 Val Cys Asn Arg Ala Thr Ala Asp Ile Gln Arg Leu Leu Ser Trp Glu
 130 135 140
 Ser Leu Lys Asp Ala Ala Pro Ser Val Ser Pro Leu Ala Ser Ser Ala
 145 150 155 160
 Ser Gly Ala Glu Ser Ser Phe Thr Leu Ala Ser Thr Pro Ser Ala Thr
 165 170 175
 Thr Pro Glu Asp Leu Ile Leu Ser Ser Arg Pro Lys Pro Ser Pro Pro
 180 185 190

Pro Pro Leu Ile Leu Ser Pro Asp Leu Ile Thr Thr Leu Ala Asp Leu
 195 200 205
 Phe Ser Pro Ser Pro Leu Arg Asp Pro Leu Pro Pro Gln Pro Val Ser
 210 215 220
 Pro Leu Asp Ser Lys Phe Pro Ile Asp His Ser Pro Pro Gln Gln Leu
 225 230 235 240
 Pro Phe Pro Leu Leu Pro Pro His His Ile Glu Arg Val Glu Pro Ser
 245 250 255
 Leu Gln Pro Glu Ala Ser Leu Ser Leu Asn Thr Ile Phe Ser Phe Gly
 260 265 270
 Ser Thr Leu Cys Gln Asp Ile Ser Gln Ala Val Asn Arg Thr Asp Ser
 275 280 285
 Cys Ala Arg His His Gly Pro Pro Thr Pro Ser Ala Leu Pro Pro Glu
 290 295 300
 Asp Cys Thr Val Thr Gln Ser Lys Ser Asn Leu Thr Val Leu Lys Thr
 305 310 315 320
 Phe Pro Glu Met Leu Ser Leu Gly Gly Ser Gly Gly Ser Ser Thr Ser
 325 330 335
 Ala Pro Thr Thr Lys Gly Ile Asp His Ser Cys Pro Ala Ser Ser Glu
 340 345 350
 Phe Ser Trp Trp Gln Pro His Ala Lys Asp Ser Phe Ser Ser Asn Phe
 355 360 365
 Val Pro Ser Asp Phe Met Glu Glu Leu Leu Thr Leu His Ser Ser Glu
 370 375 380
 Ala Ser Leu Gly Gly His Ser Val Ala Asn Ile Ile Gln Pro Val Asn
 385 390 395 400
 Ile Ser Phe Leu Ser His Asp Ile Pro Ala Leu Leu Glu Arg Gln Val
 405 410 415
 Lys Arg Arg Gly Asp Phe Leu Met Trp Lys Glu Asn Gly Lys Lys Pro
 420 425 430
 Gly Ser Phe Pro Thr Gln Leu Arg Pro Asn Tyr Gln Leu Asn Ser Ser
 435 440 445
 Arg Asn Met Leu Thr Ser Thr Ala Val Lys His Asp Leu Ala Glu Ser
 450 455 460
 Phe Pro Phe Trp Ala Ser Lys Gly Lys Leu Glu Trp Gln His Ile His
 465 470 475 480

Gln Gln Pro Pro Tyr Ser Lys Cys Phe Glu Asp His Leu Glu Gln Lys
 485 490 495
 Tyr Val Gln Leu Phe Trp Gly Leu Pro Ser Leu His Ser Glu Ser Leu
 500 505 510
 His Pro Thr Val Phe Val Gln His Gly Arg Ser Ser Met Phe Val Phe
 515 520 525
 Phe Asn Gly Ile Thr Asn Thr Ser Met Ser His Glu Ser Pro Val Leu
 530 535 540
 Pro Pro Pro Gln Pro Leu Phe Leu Pro Ser Thr Gln Pro Leu Pro Leu
 545 550 555 560
 Pro Gln Thr Leu Pro Arg Gly Gln Ser Leu His Leu Thr Gln Val Lys
 565 570 575
 Ser Leu Ala Gln Pro Gln Ser Pro Phe Pro Ala Leu Pro Pro Ser Pro
 580 585 590
 Leu Phe Leu Ile Arg Val Cys Gly Val Cys Phe His Arg Pro Gln Asn
 595 600 605
 Glu Ala Arg Ser Leu Met Pro Ser Glu Ile Asn His Leu Glu Trp Asn
 610 615 620
 Val Leu Gln Lys Val Gln Glu Ser Val Trp Gly Leu Pro Ser Val Val
 625 630 635 640
 Gln Lys Ser Gln Glu Asp Phe Cys Pro Pro Ala Pro Asn Pro Val Leu
 645 650 655
 Val Arg Lys Ser Phe Lys Val His Val Pro Ile Ser Ile Ile Pro Gly
 660 665 670
 Asp Phe Pro Leu Ser Ser Glu Val Arg Lys Lys Leu Glu Gln His Ile
 675 680 685
 Arg Arg Arg Leu Ile Gln Arg Arg Trp Gly Leu Pro Arg Arg Ile His
 690 695 700
 Glu Ser Leu Ser Leu Leu Arg Pro Gln Asn Lys Ile Ser Glu Leu Ser
 705 710 715 720
 Val Ser Glu Ser Ile His Gly Pro Leu Asn Ile Ser Leu Val Glu Gly
 725 730 735
 Gln Arg Cys Asn Val Leu Lys Lys Ser Ala Ser Ser Phe Pro Arg Ser
 740 745 750
 Phe His Glu Arg Ser Ser Asn Met Leu Ser Met Glu Asn Val Gly Asn
 755 760 765

Tyr Gln Gly Cys Ser Gln Glu Thr Ala Pro Lys Asn His Leu Leu His
 770 775 780
 Asp Pro Glu Thr Ser Ser Glu Glu Asp Leu Arg Ser Asn Ser Glu Arg
 785 790 795 800
 Asp Leu Gly Thr His Met Met His Leu Ser Gly Asn Asp Ser Gly Val
 805 810 815
 Arg Leu Gly Gln Lys Gln Leu Glu Asn Ala Leu Thr Val His Leu Ser
 820 825 830
 Lys Lys Phe Glu Glu Ile Asn Glu Gly Arg Met Pro Gly Thr Val His
 835 840 845
 Ser Ser Trp His Ser Val Lys Gln Thr Ile Cys Leu Pro Glu Lys Ser
 850 855 860
 His Ser Gln Ile Lys His Arg Asn Leu Ala Ala Leu Val Ser Glu Asp
 865 870 875 880
 His Gly Val Asp Thr Ser Gln Glu Met Ser Phe Leu Ser Ser Asn Lys
 885 890 895
 Gln Lys Met Leu Glu Ala His Ile Lys Ser Phe His Met Lys Pro Ile
 900 905 910
 Leu Asn Leu Ser Ile
 915

<210> 3752

<211> 1318

<212> PRT

<213> Homo sapiens

<400> 3752

Met Asp Arg Gln Cys Ser Glu Lys Pro His Ser Cys Thr Pro Thr Gly
 1 5 10 15
 Arg Val Ser Ser Ala Val Ser Gln Asn Ser Arg Ile Ser Pro Pro Val
 20 25 30
 Ser Thr Ser Met Lys Asp Ser Ser Cys Met Glu Val His Gln Asp Ser
 35 40 45
 Ala Arg Arg Asp Arg Trp Ser His Pro Thr Thr Ile Leu Leu His Lys
 50 55 60

Ser Gln Ser Ser Gln Ala Thr Leu Met Pro Gln Glu His Arg Met Phe
 65 70 75 80
 Met Gly Glu Ala Tyr Ser Ala Ala Thr Cys Phe Lys Met Leu Gln Asp
 85 90 95
 Met Asn Ser Ala Asp Pro Phe His Leu Lys Tyr Ile Ile Lys Lys Ile
 100 105 110
 Lys Asn Met Ala His Gly Ser Pro Lys Leu Val Met Glu Thr Ile His
 115 120 125
 Asp Tyr Phe Ile Asp Asn Pro Glu Ile Ser Ser Arg His Lys Phe Arg
 130 135 140
 Leu Phe Gln Thr Leu Glu Met Val Ile Gly Ala Ser Asp Val Leu Glu
 145 150 155 160
 Glu Thr Trp Glu Lys Thr Phe Thr Arg Leu Ala Leu Glu Asn Met Thr
 165 170 175
 Lys Ala Thr Glu Leu Glu Asp Ile Tyr Gln Asp Ala Ala Ser Asn Met
 180 185 190
 Leu Val Ala Ile Cys Arg His Ser Trp Arg Val Val Ala Gln His Leu
 195 200 205
 Glu Thr Glu Leu Leu Thr Gly Val Phe Pro His Arg Ser Leu Leu Tyr
 210 215 220
 Val Met Gly Val Leu Ser Ser Ser Glu Glu Leu Phe Ser Gln Glu Asp
 225 230 235 240
 Lys Ala Cys Trp Glu Glu Gln Leu Ile Gln Met Ala Ile Lys Ser Val
 245 250 255
 Pro Phe Leu Ser Thr Asp Val Trp Ser Lys Glu Leu Leu Trp Thr Leu
 260 265 270
 Thr Thr Pro Ser Trp Thr Gln Gln Glu Gln Ser Pro Glu Lys Ala Phe
 275 280 285
 Met Phe Thr Tyr Tyr Gly Leu Ile Leu Gln Ala Glu Lys Asn Gly Ala
 290 295 300
 Thr Val Arg Arg His Leu Gln Ala Leu Leu Glu Thr Ser His Gln Trp
 305 310 315 320
 Pro Lys Gln Arg Glu Gly Met Ala Leu Thr Ser Gly Leu Ala Ala Thr
 325 330 335
 Arg His Leu Asp Asp Val Trp Ala Val Leu Asp Gln Phe Gly Arg Ser
 340 345 350

Arg Pro Ile Arg Trp Ser Leu Pro Ser Ser Ser Pro Lys Asn Ser Glu
 355 360 365
 Asp Leu Arg Trp Lys Trp Ala Ser Ser Thr Ile Leu Leu Ala Tyr Gly
 370 375 380
 Gln Val Ala Ala Lys Ala Arg Ala His Ile Leu Pro Trp Val Asp Asn
 385 390 395 400
 Ile Val Ser Arg Met Val Phe Tyr Phe His Tyr Ser Ser Trp Asp Glu
 405 410 415
 Thr Leu Lys Gln Ser Phe Leu Thr Ala Thr Leu Met Leu Met Gly Ala
 420 425 430
 Val Ser Arg Ser Glu Gly Ala His Ser Tyr Glu Phe Phe Gln Thr Ser
 435 440 445
 Glu Leu Leu Gln Cys Leu Met Val Leu Met Glu Lys Glu Pro Gln Asp
 450 455 460
 Thr Leu Cys Thr Arg Ser Arg Gln Gln Ala Met His Ile Ala Ser Ser
 465 470 475 480
 Leu Cys Lys Leu Arg Pro Pro Ile Asp Leu Glu Arg Lys Ser Gln Leu
 485 490 495
 Leu Ser Thr Cys Phe Arg Ser Val Phe Ala Leu Pro Leu Leu Asp Ala
 500 505 510
 Leu Glu Lys His Thr Cys Leu Phe Leu Glu Pro Pro Asn Ile Gln Leu
 515 520 525
 Trp Pro Val Ala Arg Glu Arg Ala Gly Trp Thr His Gln Gly Trp Gly
 530 535 540
 Pro Arg Ala Val Leu His Cys Ser Glu His Leu Gln Ser Leu Tyr Ser
 545 550 555 560
 Arg Thr Met Glu Ala Leu Asp Phe Met Leu Gln Ser Leu Ile Met Gln
 565 570 575
 Asn Pro Thr Ala Asp Glu Leu His Phe Leu Leu Ser His Leu Tyr Ile
 580 585 590
 Trp Leu Ala Ser Glu Lys Ala His Glu Arg Gln Arg Ala Val His Ser
 595 600 605
 Cys Met Ile Leu Leu Lys Phe Leu Asn His Asn Gly Tyr Leu Asp Pro
 610 615 620
 Lys Glu Asp Phe Lys Arg Ile Gly Gln Leu Val Gly Ile Leu Gly Met
 625 630 635 640

Leu Cys Gln Asp Pro Asp Arg Ala Thr Gln Arg Cys Ser Leu Glu Gly
 645 650 655
 Ala Ser His Leu Tyr Gln Leu Leu Met Cys His Lys Thr Gly Glu Ala
 660 665 670
 Leu Gln Ala Glu Ser Gln Ala Pro Lys Glu Leu Ser Gln Ala His Ser
 675 680 685
 Asp Gly Ala Pro Leu Trp Asn Ser Arg Asp Gln Lys Ala Thr Pro Leu
 690 695 700
 Gly Pro Gln Glu Met Ala Lys Asn His Ile Phe Gln Leu Cys Ser Phe
 705 710 715 720
 Gln Val Ile Lys Asn Ile Met Gln Gln Leu Thr Leu Ala Glu Leu Ser
 725 730 735
 Asp Leu Ile Trp Thr Ala Ile Asp Gly Leu Gly Ser Thr Ser Pro Phe
 740 745 750
 Arg Val Gln Ala Ala Ser Glu Met Leu Leu Thr Ala Val Gln Glu His
 755 760 765
 Gly Ala Lys Leu Glu Ile Val Ser Ser Met Ala Gln Ala Ile Arg Leu
 770 775 780
 Arg Leu Cys Ser Val His Ile Pro Gln Ala Lys Glu Lys Thr Leu His
 785 790 795 800
 Ala Ile Thr Leu Leu Ala Arg Ser His Thr Cys Glu Leu Val Ala Thr
 805 810 815
 Phe Leu Asn Ile Ser Ile Pro Leu, Asp Ser His Thr Phe Gln Leu Trp
 820 825 830
 Arg Ala Leu Gly Ala Glu Gln Pro Thr Ser His Leu Val Leu Thr Thr
 835 840 845
 Leu Leu Ala Cys Leu Gln Glu Arg Pro Leu Pro Thr Gly Ala Ser Asp
 850 855 860
 Ser Ser Pro Cys Pro Lys Glu Lys Thr Tyr Leu Arg Leu Leu Ala Ala
 865 870 875 880
 Met Asn Met Leu His Glu Leu Gln Phe Ala Arg Glu Phe Lys Gln Ala
 885 890 895
 Val Gln Glu Gly Tyr Pro Lys Leu Phe Leu Ala Leu Leu Thr Gln Met
 900 905 910
 His Tyr Val Leu Glu Leu Asn Leu Pro Ser Glu Pro Gln Pro Lys Gln
 915 920 925

Gln Ala Gln Glu Ala Ala Val Pro Ser Pro Gln Ser Cys Ser Thr Ser
 930 935 940
 Leu Glu Ala Leu Lys Ser Leu Leu Ser Thr Thr Gly His Trp His Asp
 945 950 955 960
 Phe Ala His Leu Glu Leu Gln Gly Ser Trp Glu Leu Phe Thr Thr Ile
 965 970 975
 His Thr Tyr Pro Lys Gly Val Gly Pro Leu Ala Arg Ala Met Val Gln
 980 985 990
 Asn His Cys Arg Gln Ile Pro Ala Val Leu Arg Gln Leu Leu Pro Ser
 995 1000 1005
 Leu Gln Ser Pro Gln Glu Arg Glu Arg Lys Val Ala Ile Leu Ile Leu
 1010 1015 1020
 Thr Lys Phe Leu Tyr Ser Pro Val Leu Leu Glu Val Leu Pro Lys Gln
 1025 1030 1035 1040
 Ala Ala Leu Thr Val Leu Ala Gln Gly Leu His Asp Pro Ser Pro Glu
 1045 1050 1055
 Val Arg Val Leu Ser Leu Gln Gly Leu Ser Asn Ile Leu Phe His Pro
 1060 1065 1070
 Asp Lys Gly Ser Leu Leu Gln Gly Gln Leu Arg Pro Leu Leu Asp Ser
 1075 1080 1085
 Phe Phe Gln Ser Ser Asp Gln Val Ile Val Cys Ile Met Gly Thr Val
 1090 1095 1100
 Ser Asp Thr Leu His Arg Leu Gly Ala Gln Gly Thr Gly Ser Gln Ser
 1105 1110 1115 1120
 Leu Gly Val Ala Ile Ser Thr Arg Ser Phe Phe Asn Asp Glu Arg Asp
 1125 1130 1135
 Gly Ile Arg Ala Ala Ala Met Ala Leu Phe Gly Asp Leu Val Ala Ala
 1140 1145 1150
 Met Ala Asp Arg Glu Leu Ser Gly Leu Arg Thr Gln Val His Gln Ser
 1155 1160 1165
 Met Val Pro Leu Leu Leu His Leu Lys Asp Gln Cys Pro Ala Val Ala
 1170 1175 1180
 Thr Gln Ala Lys Phe Thr Phe Tyr Arg Cys Ala Val Leu Leu Arg Trp
 1185 1190 1195 1200
 Arg Leu Leu His Thr Leu Phe Cys Thr Leu Ala Trp Glu Arg Gly Leu
 1205 1210 1215

Ser Ala Arg His Phe Leu Trp Thr Cys Leu Met Thr Arg Ser Gln Glu
 1220 1225 1230
 Glu Phe Ser Ile His Leu Ser Gln Ala Leu Ser Tyr Leu His Ser His
 1235 1240 1245
 Ser Cys His Ile Lys Thr Trp Val Thr Leu Phe Ile Gly His Thr Ile
 1250 1255 1260
 Cys Tyr His Pro Gln Ala Val Phe Gln Met Leu Asn Ala Val Asp Thr
 1265 1270 1275 1280
 Asn Leu Leu Phe Arg Thr Phe Glu His Leu Arg Ser Asp Pro Glu Pro
 1285 1290 1295
 Ser Ile Arg Glu Phe Ala Thr Ser Gln Leu Ser Phe Leu Gln Lys Val
 1300 1305 1310
 Ser Ala Arg Pro Lys Gln
 1315

<210> 3753

<211> 240

<212> PRT

<213> Homo sapiens

<400> 3753

Met Pro Pro Ala Pro Ala Ser Pro Pro Leu Ser Leu Pro Gly Arg Asp
 1 5 10 15
 Gly Arg Arg Leu Cys Leu Pro Leu Pro Asp Leu Pro Cys Pro Gly Glu
 20 25 30
 Val Asp Thr Lys His Val Leu Gly Asn Leu Leu Pro Thr His Gly Ala
 35 40 45
 Val Gln Ala Ala Ala Ser Gln Pro Trp Ser Leu Leu Gly Val His Ser
 50 55 60
 Pro Ile Ala Thr Pro Ala Pro Leu Arg Gly Gln Ile Pro Ile Ser Leu
 65 70 75 80
 Ser Cys Leu Gln Asp Glu Tyr Arg Gly Pro Ser Ala Gly Gln Ser Gln
 85 90 95
 Glu Leu Trp Lys Cys Ser Leu Gln Arg Pro His Leu Asp Ala Pro Arg
 100 105 110

Gly	Cys	Pro	Leu	Ala	Glu	Ser	Thr	Gly	Arg	Val	Glu	Ala	Ala	Ser	Ala
115						120						125			
Met	Ser	Ala	Ala	His	Val	Pro	Gly	Ala	His	Pro	Arg	Arg	Arg	Leu	Cys
130						135						140			
Leu	Leu	Ala	Ala	Pro	Thr	Asp	Phe	Leu	Ser	Phe	Leu	Trp	Ser	Ala	Leu
145						150						155			
Pro	Pro	Ser	Leu	Pro	Pro	Pro	Tyr	Pro	Gln	Arg	His	Leu	Leu	Thr	Pro
			165						170						
Ser	Ser	Met	Leu	Cys	Pro	Gly	Trp	Asp	Ala	Ser	Trp	Ala	Val	Pro	Gly
			180						185						
Pro	Arg	Leu	Glu	Pro	Leu	Pro	Leu	Phe	Leu	Trp	Val	Ser	Pro	Cys	Pro
195						200						205			
Ala	Ala	Gly	Asn	Leu	Arg	Val	Leu	Ser	Lys	Lys	Ser	Cys	Lys	Leu	Ala
210						215						220			
Arg	Pro	Gly	Arg	Ala	Glu	Ala	Ser	Phe	Leu	Pro	Asp	Gly	Trp	Phe	Ala
225						230						235			
												240			

<210> 3754

<211> 125

<212> PRT

<213> Homo sapiens

<400> 3754

Met	Trp	Ser	Leu	Pro	Gly	Gly	Leu	Leu	Ser	Gly	Leu	Ala	Thr	His	Pro
1				5					10					15	
Trp	Gln	His	Cys	Pro	Ile	Ser	Gly	Leu	Asp	Phe	Leu	Arg	Ser	Cys	Arg
			20					25					30		
Gly	His	Ser	Leu	Gln	Pro	Arg	Arg	Gly	Ser	Pro	Leu	Val	Gln	Pro	Lys
			35					40					45		
Leu	Ser	Met	Gly	Leu	Glu	His	Pro	Cys	Gln	Pro	Cys	Ala	Pro	Ser	Thr
		50					55					60			
Pro	Arg	Ser	Arg	Phe	Ser	Ser	Val	Ser	Gln	Gln	Arg	Gly	Ser	Val	Leu
65				70					75					80	
Pro	Ser	Leu	Cys	Val	Ser	Trp	Ala	Lys	Thr	Trp	Gly	Ala	Leu	Gly	Gln
				85					90					95	

Gly Trp Cys Phe Pro Gln Ala His Leu Gly Arg Gly Leu Ala Pro Ser
 100 105 110
 Leu Ala Gln Val Leu Ser Ser Ala Leu Val Ala Leu Glu
 115 120 125

<210> 3755

<211> 890

<212> PRT

<213> Homo sapiens

<400> 3755

Met Met Met Val Met Gln Pro Glu Gly Leu Gly Ala Gly Glu Gly Arg
 1 5 10 15
 Phe Ala Gly Gly Gly Gly Gly Gly Glu Tyr Met Glu Gln Glu Glu Asp
 20 25 30
 Trp Asp Arg Asp Leu Leu Leu Asp Pro Ala Trp Cys Asn Ser His Leu
 35 40 45
 Arg Lys Ala Gly Thr Gln Ile Glu Asn Ile Glu Glu Asp Phe Arg Asn
 50 55 60
 Gly Leu Lys Leu Met Leu Leu Leu Glu Val Ile Ser Gly Glu Arg Leu
 65 70 75 80
 Pro Arg Pro Asp Lys Gly Lys Met Arg Phe His Lys Ile Ala Asn Val
 85 90 95
 Asn Lys Ala Leu Asp Phe Ile Ala Ser Lys Gly Val Lys Leu Val Ser
 100 105 110
 Ile Gly Ala Glu Glu Ile Val Asp Gly Asn Leu Lys Met Thr Leu Gly
 115 120 125
 Met Ile Trp Thr Ile Ile Leu Arg Phe Ala Ile Gln Asp Ile Ser Val
 130 135 140
 Glu Glu Thr Ser Ala Lys Glu Gly Leu Leu Leu Trp Cys Gln Arg Lys
 145 150 155 160
 Thr Ala Pro Tyr Arg Asn Val Asn Val Gln Asn Phe His Thr Ser Trp
 165 170 175
 Lys Asp Gly Leu Ala Leu Cys Ala Leu Ile His Arg His Arg Pro Asp
 180 185 190

Leu Ile Asp Tyr Ala Lys Leu Arg Lys Asp Asp Pro Ile Gly Asn Leu
 195 200 205
 Asn Thr Ala Phe Glu Val Ala Glu Lys Tyr Leu Asp Ile Pro Lys Met
 210 215 220
 Leu Asp Ala Glu Asp Ile Val Asn Thr Pro Lys Pro Asp Glu Lys Ala
 225 230 235 240
 Ile Met Thr Tyr Val Ser Cys Phe Tyr His Ala Phe Ala Gly Ala Glu
 245 250 255
 Gln Ala Glu Thr Ala Ala Asn Arg Ile Cys Lys Val Leu Ala Val Asn
 260 265 270
 Gln Glu Asn Glu Lys Leu Met Glu Glu Tyr Glu Lys Leu Ala Ser Glu
 275 280 285
 Leu Leu Glu Trp Ile Arg Arg Thr Val Pro Trp Leu Glu Asn Arg Val
 290 295 300
 Gly Glu Pro Ser Met Ser Ala Met Gln Arg Lys Leu Glu Asp Phe Arg
 305 310 315 320
 Asp Tyr Arg Arg Leu His Lys Pro Pro Arg Ile Gln Glu Lys Cys Gln
 325 330 335
 Leu Glu Ile Asn Phe Asn Thr Leu Gln Thr Lys Leu Arg Leu Ser His
 340 345 350
 Arg Pro Ala Phe Met Pro Ser Glu Gly Lys Leu Val Ser Asp Ile Ala
 355 360 365
 Asn Ala Trp Arg Gly Leu Glu Gln Val Glu Lys Gly Tyr Glu Asp Trp
 370 375 380
 Leu Leu Ser Glu Ile Arg Arg Leu Gln Arg Leu Gln His Leu Ala Glu
 385 390 395 400
 Lys Phe Arg Gln Lys Ala Ser Leu His Glu Ala Trp Thr Arg Gly Lys
 405 410 415
 Glu Glu Met Leu Ser Gln Arg Asp Tyr Asp Ser Ala Leu Leu Gln Glu
 420 425 430
 Val Arg Ala Leu Leu Arg Arg His Glu Ala Phe Glu Ser Asp Leu Ala
 435 440 445
 Ala His Gln Asp Arg Val Glu His Ile Ala Ala Leu Ala Gln Glu Leu
 450 455 460
 Asn Glu Leu Asp Tyr His Glu Ala Ala Ser Val Asn Ser Arg Cys Gln
 465 470 475 480

Ala Ile Cys Asp Gln Trp Asp Asn Leu Gly Thr Leu Thr Gln Lys Arg			
	485	490	495
Arg Asp Ala Leu Glu Arg Met Glu Lys Leu Leu Glu Thr Ile Asp Gln			
	500	505	510
Leu Gln Leu Glu Phe Ala Arg Arg Ala Ala Pro Phe Asn Asn Trp Leu			
	515	520	525
Asp Gly Ala Val Glu Asp Leu Gln Asp Val Trp Leu Val His Ser Val			
	530	535	540
Glu Glu Thr Gln Ser Leu Leu Thr Ala His Asp Gln Phe Lys Ala Thr			
545	550	555	560
Leu Pro Glu Ala Asp Arg Glu Arg Gly Ala Ile Met Gly Ile Gln Gly			
	565	570	575
Glu Ile Gln Lys Ile Cys Gln Thr Tyr Gly Leu Arg Pro Cys Ser Thr			
	580	585	590
Asn Pro Tyr Ile Thr Leu Ser Pro Gln Asp Ile Asn Thr Lys Trp Asp			
	595	600	605
Met Val Arg Lys Leu Val Pro Ser Arg Asp Gln Thr Leu Gln Glu Glu			
	610	615	620
Leu Ala Arg Gln Gln Val Asn Glu Arg Leu Arg Arg Gln Phe Ala Ala			
625	630	635	640
Gln Ala Asn Ala Ile Gly Pro Trp Ile Gln Ala Lys Val Glu Glu Val			
	645	650	655
Gly Arg Leu Ala Ala Gly Leu Ala Gly Ser Leu Glu Glu Gln Met Ala			
	660	665	670
Gly Leu Arg Gln Gln Glu Gln Asn Ile Ile Asn Tyr Lys Thr Asn Ile			
	675	680	685
Asp Arg Leu Glu Gly Asp His Gln Leu Leu Gln Glu Ser Leu Val Phe			
	690	695	700
Asp Ser Lys His Thr Val Tyr Ser Met Glu His Ile Arg Val Gly Trp			
705	710	715	720
Glu Gln Leu Leu Thr Ser Ile Ala Arg Thr Ile Asn Glu Val Glu Asn			
	725	730	735
Gln Val Leu Thr Arg Asp Ala Lys Gly Leu Ser Gln Glu Gln Leu Asn			
	740	745	750
Glu Phe Arg Ala Ser Phe Asn His Phe Asp Arg Lys Arg Asn Gly Met			
	755	760	765

Met Glu Pro Asp Asp Phe Arg Ala Cys Leu Ile Ser Met Gly Tyr Asp
 770 775 780
 Leu Gly Glu Val Glu Phe Ala Arg Ile Met Thr Met Val Asp Pro Asn
 785 790 795 800
 Ala Ala Gly Val Val Thr Phe Gln Ala Phe Ile Asp Phe Met Thr Arg
 805 810 815
 Glu Thr Ala Glu Thr Asp Thr Thr Glu Gln Val Val Ala Ser Phe Lys
 820 825 830
 Ile Leu Ala Gly Asp Lys Asn Tyr Ile Thr Pro Glu Glu Leu Arg Arg
 835 840 845
 Glu Leu Pro Ala Lys Gln Ala Glu Tyr Cys Ile Arg Arg Met Val Pro
 850 855 860
 Tyr Lys Gly Ser Gly Ala Pro Ala Gly Ala Leu Asp Tyr Val Ala Phe
 865 870 875 880
 Ser Ser Ala Leu Tyr Gly Glu Ser Asp Leu
 885 890

<210> 3756

<211> 279

<212> PRT

<213> Homo sapiens

<400> 3756

Met Arg Cys Pro Pro Gly Ala Ser Leu Ala Ala Ala Arg Gln Asp Leu
 1 5 10 15
 Pro Ala Trp Asp Tyr Ser Met Arg Gly Arg Ser Gly Trp Ser Trp Cys
 20 25 30
 Gly Ser Leu Ser Gln Pro Phe Leu Cys Ile Gly Ala Leu Pro Arg Arg
 35 40 45
 His Leu Ser Cys Lys Arg Gly Glu Cys Asp Val Asp Thr Trp Ala Pro
 50 55 60
 Gly Leu Ala Cys Val Ile Trp Ala Gly Pro His Lys His His Lys His
 65 70 75 80
 Leu Phe His His Ala Ile Asp Gly Cys Trp Ala Ala Gln Gly Cys Asp
 85 90 95

Val Glu Leu Gly Asn Pro Ala Trp Glu Gly Ser Ile Pro Gly Ala Ala
 100 105 110

Phe Gln Lys Lys Asn Ser Leu His Gln Glu Gly Val Ala Glu Pro Gln
 115 120 125

Ser Pro Arg Asn Leu Arg Glu Ala Pro Lys Gly Gly Leu Pro Glu Asp
 130 135 140

Thr His Pro Pro Tyr Leu Leu His Thr Gly Ser Ser Asn Gln Thr Val
 145 150 155 160

Trp Pro Lys Gln Pro Gly Tyr Phe His Leu Ser Gln Gln Pro Trp Ala
 165 170 175

Thr Leu Gly Met Val Pro Asn Met Ala Cys Ala Ala Val Thr Val Leu
 180 185 190

Arg Gly Leu Ala Ser Thr Gly Ser Phe Leu Leu Asp Gly Gly Thr Gly
 195 200 205

Ala Arg Ile Tyr Leu Leu Pro Tyr Ser Val Pro Ala Gln Pro Arg Ser
 210 215 220

Met Asp Pro Phe Thr Gly Cys Phe Ile Pro His Pro Pro Glu Leu Leu
 225 230 235 240

Gly Pro Leu Arg Cys Pro Gly Asp Gly Gly Ala Leu Cys Leu Cys Pro
 245 250 255

Val Ala Ala Ile Ala Ala Thr Thr Ser Thr Ser Ser Ala Gly Trp Pro
 260 265 270

Pro Gly Thr Ala Ser Pro Gly
 275

<210> 3757

<211> 255

<212> PRT

<213> Homo sapiens

<400> 3757

Met Met Ser Ile Phe Leu Met Gly Cys Tyr Asp Pro Gly Ser Gln Lys
 1 5 10 15

Trp Cys Thr Val Thr Lys Cys Ala Gly Gly His Asp Asp Ala Thr Leu

20	25	30
Ala Arg Leu Gln Asn Glu Leu Asp Met Val Lys Ile Ser Lys Asp Pro		
35	40	45
Ser Lys Ile Pro Ser Trp Leu Lys Val Asn Lys Ile Tyr Tyr Pro Asp		
50	55	60
Phe Ile Val Pro Asp Pro Lys Lys Ala Ala Val Trp Glu Ile Thr Gly		
65	70	75
Ala Glu Phe Ser Lys Ser Glu Ala His Thr Ala Asp Gly Ile Ser Ile		
85	90	95
Arg Phe Pro Arg Cys Thr Arg Ile Arg Asp Asp Lys Asp Trp Lys Ser		
100	105	110
Ala Thr Asn Leu Pro Gln Leu Lys Glu Leu Tyr Gln Leu Ser Lys Glu		
115	120	125
Lys Ala Asp Phe Thr Val Val Ala Gly Asp Glu Gly Ser Ser Thr Thr		
130	135	140
Gly Gly Ser Ser Glu Glu Asn Lys Gly Pro Ser Gly Ser Ala Val Ser		
145	150	155
Arg Lys Ala Pro Ser Lys Pro Ser Ala Ser Thr Lys Lys Ala Glu Gly		
165	170	175
Lys Leu Ser Asn Ser Asn Ser Lys Asp Gly Asn Met Gln Thr Ala Lys		
180	185	190
Pro Ser Ala Met Lys Val Gly Glu Lys Leu Ala Thr Lys Ser Ser Pro		
195	200	205
Val Lys Val Gly Glu Lys Arg Lys Ala Ala Asp Glu Thr Leu Cys Gln		
210	215	220
Thr Lys Val Arg Val Lys Thr Ala Thr His His Val Gly Gln Phe Ser		
225	230	235
Pro Gly Cys Val Pro Asn Leu Leu Tyr Lys Lys Phe Glu Arg Gly		
245	250	255

<210> 3758

<211> 202

<212> PRT

<213> Homo sapiens

<400> 3758

Met Asn Val Pro Arg Ser Gln Pro Ala Ser Lys Glu Leu Leu Lys Gly
 1 5 10 15
 Glu Leu Ser Met Tyr Asn Asn Glu Arg Arg Phe Arg Ile Arg Ser Gln
 20 25 30
 Asp Ser Tyr Asn Pro Phe Ile Leu Leu Phe Phe Ser Arg Arg Ser Leu
 35 40 45
 Ser Leu Ser Pro Arg Leu Glu Cys Ser Gly Val Ile Leu Ala His Cys
 50 55 60
 Asn Leu His Leu Pro Gly Ser Ser Asp Ser Pro Ala Ser Ala Ser Arg
 65 70 75 80
 Val Ala Gly Ile Thr Val Ala Arg His His Ala Trp Leu Ile Phe Val
 85 90 95
 Phe Leu Val Glu Thr Gly Phe His His Val Gly Gln Ala Gly Leu Glu
 100 105 110
 Leu Leu Thr Ser Gly Asp Pro Pro Thr Ser Ala Ser Gln Ser Ala Gly
 115 120 125
 Ile Thr Gly Val Ser His His Thr Arg Phe Ile Leu Leu Phe Thr His
 130 135 140
 Ser Ser Phe Asn Lys His Thr Val Glu Ile His Ile Ser Val Ser Ala
 145 150 155 160
 Phe Asn His Arg Lys Ser Glu Leu Ser Thr Gln Leu Leu Met Cys Trp
 165 170 175
 Ile His Glu Lys Cys Ser Val Cys Phe Asn Leu Leu Ala Leu Lys Tyr
 180 185 190
 Cys Met Gln Ser Val Gly Phe Asn Ser Leu
 195 200

<210> 3759

<211> 108

<212> PRT

<213> Homo sapiens

<400> 3759

Met Ser Ala Ala Phe Pro Gly Ala Ser Leu Tyr Leu Pro Met Ala Gln

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      1             5             10             15
Ser Val Ala Val Gly Pro Leu Gly Ser Thr Ile Pro Met Ala Tyr Tyr
      20             25             30
Pro Val Gly Pro Ile Tyr Pro Pro Gly Ser Thr Val Leu Val Glu Gly
      35             40             45
Gly Tyr Asp Ala Gly Ala Arg Phe Gly Ala Gly Ala Thr Ala Gly Asn
      50             55             60
Ile Pro Pro Pro Pro Pro Gly Cys Pro Pro Asn Ala Ala Gln Leu Ala
      65             70             75             80
Val Met Gln Gly Ala Asn Val Leu Val Thr Gln Arg Lys Gly Asn Phe
      85             90             95
Phe Met Gly Gly Ser Asp Gly Gly Tyr Thr Ile Trp
      100             105

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<210> 3760

<211> 377

<212> PRT

<213> Homo sapiens

<400> 3760

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Met Gly His Lys Arg Glu Phe Arg Ala Pro Thr Leu Ala Ser Leu Glu
      1             5             10             15
Asn Cys Met Lys Leu Ser Gln Met Ala Val Gln Gly Leu Gln Gln Phe
      20             25             30
Lys Ser Pro Leu Leu Gln Leu Pro His Ile Glu Glu Asp Asn Leu Arg
      35             40             45
Arg Val Ser Asn His Lys Lys Tyr Lys Ile Lys Thr Ile Gln Asp Leu
      50             55             60
Val Ser Leu Lys Glu Ser Asp Arg His Thr Leu Leu His Phe Leu Glu
      65             70             75             80
Asp Glu Lys Tyr Glu Glu Val Met Ala Val Leu Gly Ser Phe Pro Tyr
      85             90             95
Val Thr Met Asp Ile Lys Ser Gln Val Leu Asp Asp Glu Asp Ser Asn
      100             105             110
Asn Ile Thr Val Gly Ser Leu Val Thr Val Leu Val Lys Leu Thr Arg

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115	120	125
Gln Thr Met Ala Glu Val Phe	Glu Lys Glu Gln Ser	Ile Cys Ala Ala
130	135	140
Glu Glu Gln Pro Ala Glu Asp	Gly Gln Gly Glu Thr	Asn Lys Asn Arg
145	150	155
Thr Lys Gly Gly Trp Gln Gln	Lys Ser Lys Gly Pro	Lys Lys Thr Ala
165	170	175
Lys Ser Lys Lys Lys Lys Pro	Leu Lys Lys Lys Pro	Thr Pro Val Leu
180	185	190
Leu Pro Gln Ser Lys Gln Gln	Lys Gln Lys Gln Ala	Asn Gly Val Val
195	200	205
Gly Asn Glu Ala Ala Val Lys	Glu Asp Glu Glu Glu	Val Ser Asp Lys
210	215	220
Gly Ser Asp Ser Glu Glu Glu	Glu Glu Leu Gln Gln	Ser Ile Gln Arg Lys
225	230	235
Glu Arg Ala Leu Leu Glu Thr	Lys Ser Lys Ile Thr	His Pro Val Tyr
245	250	255
Ser Leu Tyr Phe Pro Glu Glu	Lys Gln Glu Trp Trp	Trp Leu Tyr Ile
260	265	270
Ala Asp Arg Lys Glu Gln Thr	Leu Ile Ser Met Pro	Tyr His Val Cys
275	280	285
Thr Leu Lys Asp Thr Glu Glu	Val Glu Leu Lys Phe	Pro Ala Pro Gly
290	295	300
Lys Pro Gly Asn Tyr Gln Tyr	Thr Val Phe Leu Arg	Ser Asp Ser Tyr
305	310	315
Met Gly Leu Asp Gln Ile Lys	Pro Leu Lys Leu Glu	Val His Glu Ala
325	330	335
Lys Pro Val Pro Glu Asn His	Pro Gln Trp Asp Thr	Ala Ile Glu Gly
340	345	350
Asp Glu Asp Gln Glu Asp Ser	Glu Gly Phe Glu Asp	Ser Phe Glu Glu
355	360	365
Glu Glu Glu Glu Glu Glu	Asp Asp Asp	
370	375	

<210> 3761

<211> 156

<212> PRT

<213> Homo sapiens

<400> 3761

```

Met Val His Gly Thr Ala Ala Val Ala Leu Tyr Leu Asp Pro Leu Phe
  1              5              10              15
Phe Leu Arg Arg Ser Phe Ala Leu Leu Pro Arg Leu Glu Cys Ser Gly
      20              25              30
Ala Ile Leu Ala His Cys Lys Leu Arg Leu Gln Gly Ser Cys His Ser
      35              40              45
Pro Ala Ser Gly Leu His Leu Ser Gly Ser Ser Asp Ser Pro Ala Ser
      50              55              60
Ala Ser Ala Ser Trp Val Gln Ala Asn Leu Arg Leu Leu Asp Pro Ser
      65              70              75              80
Asp Ser Pro Ala Ser Ala Ser Gln Leu Ala Gly Thr Thr Gly Val Arg
      85              90              95
Asn His Ala Gln Leu Ile Phe Val Phe Leu Val Glu Met Gly Phe His
      100             105             110
His Val Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser Gly Asp Leu Arg
      115             120             125
Ala Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Val Arg His Arg Ala
      130             135             140
Arg Pro Ser Val Ser Phe Lys Gln Gly Ser Gly Glu
      145             150             155

```

<210> 3762

<211> 147

<212> PRT

<213> Homo sapiens

<400> 3762

```

Met Ser Ser Thr Trp Gln Val Gly Cys Leu Phe Pro Asp Ile Ser Ser
  1              5              10              15

```

Leu Phe Gln Ser Arg Arg Gly Arg Thr Lys Gly Ile Pro Thr Leu Gly
 20 25 30
 Gln Leu His Phe Thr Ala Phe Leu Lys Thr Leu Pro Arg Glu Leu Cys
 35 40 45
 Phe Ile Ser Leu Ala Gly Thr Val Ser His Gly Gln Pro Trp Leu Gln
 50 55 60
 Arg Arg Leu Gly Val Leu Leu Leu Phe Phe Lys Met Val Ser Cys Ser
 65 70 75 80
 Val Val Gln Phe Gly Val Gln Trp Arg Asp Leu Gly Ser Leu Gln Pro
 85 90 95
 Pro Pro Pro Gly Phe Lys Arg Phe Ser Cys Leu Ser Leu Ser Ser Ser
 100 105 110
 Trp Asp Tyr Arg Pro Thr Pro Pro His Pro Ala Asn Phe Cys Ile Phe
 115 120 125
 Ser Arg Asp Gly Val Leu Pro Cys Trp Pro Ser Trp Ser Gln Thr Ala
 130 135 140
 Asp Leu Arg
 145

<210> 3763

<211> 367

<212> PRT

<213> Homo sapiens

<400> 3763

Met Cys Gly Asp Gly Thr Asn Asp Val Gly Ala Leu Lys His Ala Asp
 1 5 10 15
 Val Gly Val Ala Leu Leu Ala Asn Ala Pro Glu Arg Val Val Glu Arg
 20 25 30
 Arg Arg Arg Pro Arg Asp Ser Pro Thr Leu Ser Asn Ser Gly Ile Arg
 35 40 45
 Ala Thr Ser Arg Thr Ala Lys Gln Arg Ser Gly Leu Pro Pro Ser Glu
 50 55 60
 Glu Gln Pro Thr Ser Gln Arg Asp Arg Leu Ser Gln Val Leu Arg Asp
 65 70 75 80

<210> 3764

<211> 109

<212> PRT

<213> Homo sapiens

<400> 3764

```

Met Asn Arg Val Cys Pro Thr Cys Trp Arg Cys Ala Leu Pro Pro Ala
 1              5              10              15
Ala Pro Gly Arg His Ser His Pro Phe Ser Asp Glu Glu Val Asp Val
      20              25              30
Trp Arg Gln Arg Val His Ala Glu Ser Leu Leu Gln Thr Arg Leu Lys
      35              40              45
Gly Gly Pro Gln Pro Leu Ser Gln Asn Val Ser Ser Val Ala Gly Ser
      50              55              60
Ala Pro Glu Glu Gln Lys Gln Trp Pro Gly Val Cys Phe Gln Leu Cys
      65              70              75              80
Ser Phe Leu Glu Ala Ser Gly Gly Cys Asp Gln Lys Ala Ala Leu Thr
      85              90              95
Gly Gly Ser Thr Gln His Leu Gln Arg Pro Lys Ser Ser
      100              105

```

<210> 3765

<211> 274

<212> PRT

<213> Homo sapiens

<400> 3765

```

Met Ser Gln Ser Lys His Thr Glu Ala Arg Glu Leu Met Tyr Ser Gly
 1              5              10              15
Ala Leu Leu Phe Phe Ser His Gly Gln Gln Asn Ser Ala Ala Asp Leu
      20              25              30
Ser Met Leu Val Leu Glu Ser Leu Glu Lys Ala Glu Val Glu Val Ala
      35              40              45

```

Asp Glu Leu Leu Glu Asn Leu Ala Lys Val Phe Ser Leu Met Asp Pro
 50 55 60
 Asn Ser Pro Glu Arg Val Thr Phe Val Ser Arg Ala Leu Lys Trp Ser
 65 70 75 80
 Ser Gly Gly Ser Gly Lys Leu Gly His Pro Arg Leu His Gln Leu Leu
 85 90 95
 Ala Leu Thr Leu Trp Lys Glu Gln Asn Tyr Cys Glu Ser Arg Tyr His
 100 105 110
 Phe Leu His Ser Ala Asp Gly Glu Gly Cys Ala Asn Met Leu Val Glu
 115 120 125
 Tyr Ser Thr Ser Arg Gly Phe Arg Ser Glu Val Asp Met Phe Val Ala
 130 135 140
 Gln Ala Val Leu Gln Phe Leu Cys Leu Lys Asn Lys Ser Ser Ala Ser
 145 150 155 160
 Val Val Phe Thr Thr Tyr Thr Gln Lys His Pro Ser Ile Glu Asp Gly
 165 170 175
 Pro Pro Phe Val Glu Pro Leu Leu Asn Phe Ile Trp Phe Leu Leu Leu
 180 185 190
 Ala Val Asp Gly Gly Lys Leu Thr Val Phe Thr Val Leu Cys Glu Gln
 195 200 205
 Tyr Gln Pro Ser Leu Arg Arg Asp Pro Met Tyr Asn Glu Tyr Leu Asp
 210 215 220
 Arg Ile Gly Gln Leu Phe Phe Gly Val Pro Pro Lys Gln Thr Ser Ser
 225 230 235 240
 Tyr Gly Gly Leu Leu Gly Asn Leu Leu Thr Ser Leu Met Gly Ser Ser
 245 250 255
 Glu Gln Glu Asp Gly Glu Glu Ser Pro Ser Asp Gly Ser Pro Ile Glu
 260 265 270
 Leu Asp

<210> 3766

<211> 798

<212> PRT

<213> Homo sapiens

<400> 3766

Met Ile Val Ala Leu Arg Glu Ala Leu Thr Ser Thr Asn Pro Lys Ala
 1 5 10 15
 Ala Leu Lys Ser Lys Ile Val Ala Glu Phe Arg Ser Gln Ala Leu Ile
 20 25 30
 Glu Glu Leu Leu Leu Tyr Lys Arg Ser Glu Asp Gln Ile Glu Leu Lys
 35 40 45
 Glu Lys Gln Leu Ser Thr Met Arg Val Asp Val Cys Ser Thr Glu Thr
 50 55 60
 Leu Lys Cys Leu Lys Asp Lys Thr Gly Gly Lys Lys Phe Ser Lys Glu
 65 70 75 80

 Phe Glu Glu Ala Ser Ser Lys Leu Glu Glu Phe Val Asn Gly Leu Asp
 85 90 95
 Lys Gln Val Lys Asn Gly Pro Ser Leu Thr Glu Ala Leu Glu Asn Ala
 100 105 110
 Gly Ile Phe Tyr Glu Ala Gln Tyr Lys Glu Val Lys Val Val Ala Asn
 115 120 125
 Ala Tyr Lys Thr Phe Ala Asn Arg Val Asn Asn Leu Lys Lys Lys Leu
 130 135 140
 Asp Gln Leu Lys Ser Thr Leu Pro Asp Pro Glu Glu Ser Pro Val Pro
 145 150 155 160
 Ser Pro Ser Met Asp Ala Pro Ser Pro Thr Gly Ser Glu Ser Pro Phe
 165 170 175
 Gln Gly Met Gly Gly Glu Glu Ser Gln Ser Pro Thr Val Glu Ser Glu
 180 185 190
 Lys Ser Ala Thr Pro Glu Pro Val Thr Asp Asn Arg Asp Val Glu Asp
 195 200 205
 Met Glu Leu Ser Asp Val Glu Asp Asp Gly Ser Lys Ile Ile Val Glu
 210 215 220
 Asp Arg Lys Glu Lys Pro Ala Glu Lys Ser Ala Val Ser Thr Ser Val
 225 230 235 240
 Pro Thr Lys Pro Thr Glu Asn Ile Ser Lys Ala Ser Ser Cys Thr Pro
 245 250 255

Val Pro Val Thr Met Thr Ala Thr Pro Pro Leu Pro Lys Pro Val Asn
 260 265 270
 Thr Ser Leu Ser Pro Ser Pro Ala Leu Ala Leu Pro Asn Leu Ala Asn
 275 280 285
 Val Asp Leu Ala Lys Ile Ser Ser Ile Leu Ser Ser Leu Thr Ser Val
 290 295 300
 Met Lys Asn Thr Gly Val Ser Pro Ala Ser Arg Pro Ser Pro Gly Thr
 305 310 315 320
 Pro Thr Ser Pro Ser Asn Leu Thr Ser Gly Leu Lys Thr Pro Ala Pro
 325 330 335
 Ala Thr Thr Thr Ser His Asn Pro Leu Ala Asn Ile Leu Ser Lys Val
 340 345 350
 Glu Ile Thr Pro Glu Ser Ile Leu Ser Ala Leu Ser Lys Thr Gln Thr
 355 360 365
 Gln Ser Ala Pro Ala Leu Gln Gly Leu Ser Ser Leu Leu Gln Ser Val
 370 375 380
 Thr Gly Asn Pro Val Pro Ala Ser Glu Ala Ala Ser Gln Ser Thr Ser
 385 390 395 400
 Ala Ser Pro Ala Asn Thr Thr Val Ser Thr Ile Lys Gly Arg Asn Leu
 405 410 415
 Pro Ser Ser Ala Gln Pro Phe Ile Pro Lys Ser Phe Asn Tyr Ser Pro
 420 425 430
 Asn Ser Ser Thr Ser Glu Val Ser Ser Thr Ser Ala Ser Lys Ala Ser
 435 440 445
 Ile Gly Gln Ser Pro Gly Leu Pro Ser Thr Thr Phe Lys Leu Pro Ser
 450 455 460
 Asn Ser Leu Gly Phe Thr Ala Thr His Asn Thr Ser Pro Ala Ala Pro
 465 470 475 480
 Pro Thr Glu Val Thr Ile Cys Gln Ser Ser Glu Val Ser Lys Pro Lys
 485 490 495
 Leu Glu Ser Glu Ser Thr Ser Pro Ser Leu Glu Met Lys Ile His Asn
 500 505 510
 Phe Leu Lys Gly Asn Pro Gly Phe Ser Gly Leu Asn Leu Asn Ile Pro
 515 520 525
 Ile Leu Ser Ser Leu Gly Ser Ser Ala Pro Ser Glu Ser His Pro Ser
 530 535 540

<211> 314

<212> PRT

<213> Homo sapiens

<400> 3767

```

Met Ala Ala Thr Asn Leu Glu Asn Gln Leu His Ser Ala Gln Lys Asn
  1             5             10             15
Leu Leu Phe Leu Gln Arg Glu His Ala Ser Thr Leu Lys Gly Leu His
      20             25             30
Ser Glu Ile Arg Arg Leu Gln Gln His Cys Thr Asp Leu Thr Tyr Glu
      35             40             45
Leu Thr Val Lys Ser Ser Glu Gln Thr Gly Asp Gly Thr Ser Lys Ser
      50             55             60
Ser Glu Leu Lys Lys Arg Cys Glu Glu Leu Glu Ala Gln Leu Lys Val
      65             70             75             80
Lys Glu Asn Glu Asn Ala Glu Leu Leu Lys Glu Leu Glu Gln Lys Asn
      85             90             95
Ala Met Ile Thr Val Leu Glu Asn Thr Ile Lys Glu Arg Glu Lys Lys
      100            105            110
Tyr Leu Glu Glu Leu Lys Ala Lys Ser His Lys Leu Thr Leu Leu Ser
      115            120            125
Ser Glu Leu Glu Gln Arg Ala Ser Thr Ile Ala Tyr Leu Thr Ser Gln
      130            135            140
Leu His Ala Ala Lys Lys Lys Leu Met Ser Ser Ser Gly Thr Ser Asp
      145            150            155            160
Ala Ser Pro Ser Gly Ser Pro Val Leu Ala Ser Tyr Lys Pro Ala Pro
      165            170            175
Pro Lys Asp Lys Leu Pro Glu Thr Pro Arg Arg Arg Met Lys Lys Ser
      180            185            190
Leu Ser Ala Pro Leu His Pro Glu Phe Glu Glu Val Tyr Arg Phe Gly
      195            200            205
Ala Glu Ser Arg Lys Leu Leu Leu Arg Glu Pro Val Asp Ala Met Pro
      210            215            220
Asp Pro Thr Pro Phe Leu Leu Ala Arg Glu Ser Ala Glu Val His Leu
      225            230            235            240
Ile Lys Glu Arg Pro Leu Val Ile Pro Pro Ile Ala Ser Asp Arg Ser
      245            250            255

```

Gly Glu Gln His Ser Pro Ala Arg Glu Lys Pro His Lys Ala His Val
 260 265 270
 Gly Val Ala His Arg Ile His His Ala Thr Pro Pro Gln Ala Gln Pro
 275 280 285
 Glu Val Lys Thr Leu Ala Val Asp Gln Val Asn Gly Gly Lys Val Val
 290 295 300
 Arg Lys His Ser Gly Thr Asp Arg Thr Val
 305 310

<210> 3768

<211> 274

<212> PRT

<213> Homo sapiens

<400> 3768

Met Thr Arg Ala Val Asn Leu Ser Cys Glu Thr Thr Glu Gly Glu Thr
 1 5 10 15
 Thr Phe Ser Lys Asn Arg Ala Gln Thr Val Pro Val Ser Leu Ser Pro
 20 25 30
 Asn Cys Ser Met Ala Trp Ser Ala Ala Asn Val Ser Ala Ala Leu Lys
 35 40 45
 Gly Lys Ala Leu Leu Trp Ser Gln His Ala Glu Leu Ala Ser Thr Pro
 50 55 60
 Leu Arg Ala Ala Pro His Gln His Trp Leu Gly Leu Asn Leu Ser Ser
 65 70 75 80
 Leu Ala Pro Arg Cys Lys Pro Trp Asn Ala Asn Pro Lys Gly Gln Thr
 85 90 95
 Pro Arg Gly Ser Gln Val Pro Gly Ala Asp Thr Phe Leu Ala Leu Ala
 100 105 110
 Val Met Ala Gln Met Glu Ala Lys Thr Thr Pro Leu Ser Thr Gly Arg
 115 120 125
 Leu Val Leu Leu Pro Arg Glu Gln Glu Pro Arg His Arg Leu Cys Thr
 130 135 140
 Glu Phe Ser Ile Tyr Phe Ser Gln Gly Gly Tyr Ala Lys Ala Val Cys
 145 150 155 160

Leu Ser Leu Ser Gly Ser His Leu Gln Pro Val Pro Val Asp Ser Val
 165 170 175
 Gly Ser Thr Val Met Leu Gly Lys Asp Pro Asn Thr Arg Thr Lys His
 180 185 190
 Val Asp Ser Cys Gln Cys Gln Asn Gly Arg Lys Gln Gly Lys Gly Ser
 195 200 205
 Trp Leu Arg Pro Phe Ala Asn Arg Val Gln Arg Cys Arg His Leu Glu
 210 215 220
 Pro Ala Arg Ser Tyr Gln Thr Gly Ser His Leu Cys Leu Gln Arg Leu
 225 230 235 240
 Leu Ser Gln Arg Gln Asp Arg Gly Ala Trp Leu Cys Gln Val Ser Phe
 245 250 255
 Trp Asp Glu Pro Ile Leu Leu Ser Gln Val Gly His Asp Gly Glu Ala
 260 265 270
 Arg Arg

<210> 3769

<211> 121

<212> PRT

<213> Homo sapiens

<400> 3769

Met Arg Asn His Phe Lys Phe Leu Ser Lys Lys Asp Lys Met Ala Ala
 1 5 10 15
 Ala Arg Arg Arg Ala Trp Arg Glu Gly Glu Arg Ala Ala Gly Ser Leu
 20 25 30
 Thr Arg Gly Leu Gln Leu Glu Pro Trp His Trp Gln Gly Ala Trp Arg
 35 40 45
 Arg Lys Arg Arg Lys Thr Val Ser Arg Gln Asp His Pro Asn Arg Ser
 50 55 60
 Ser Lys Leu Pro Trp Thr Ser Leu Pro Cys Pro His Arg Glu Ala Ala
 65 70 75 80
 Gly Asp Arg Ala Tyr Leu Gly Asn Thr Asn His Gly Ser Asp Thr Ser
 85 90 95

Glu Met Ser Cys Arg Ala Ser Ala Ser Thr Leu Ile Gln Thr Leu Ser
 100 105 110
 Phe Ser Glu Leu Leu Gln Ala Pro Gly
 115 120

<210> 3770

<211> 147

<212> PRT

<213> Homo sapiens

<400> 3770

Met Gly Gln Val Trp Asn Leu Gly Ala Cys Gln Lys Gly Glu Arg Leu
 1 5 10 15
 Cys Gly Gln Thr His Leu Ala Cys Asn Pro Pro Leu Asn Ala Met His
 20 25 30
 Val Thr Leu Gly Ala Ser Leu Asn Phe Cys Gly His Gln Cys Pro His
 35 40 45
 Leu Gln Lys Cys Lys Trp Gln His Leu Phe Arg Ile Phe Leu Ile Arg
 50 55 60
 Ile Asp Glu Ile Leu Leu Lys Ile Ser Ser Thr Trp Gly Ala Pro Arg
 65 70 75 80
 Lys Ala Ser Ser Tyr His Phe Phe Asn Ala Ser Ser Ser Trp Val Ser
 85 90 95
 Lys Thr Ser Ile Ser Gln Pro Phe Pro Cys Leu Gln Asn Thr Gln Asn
 100 105 110
 Met Ala Leu Phe Val Trp His Arg Gly Met Trp Arg Gln Glu Val Ser
 115 120 125
 Gly Gly Tyr Val Gly Cys Arg Cys Pro Ser Ser Cys Ser Leu Gly Ala
 130 135 140

Ile Pro Gly

145

<210> 3771

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3771

```

Met Cys Val Cys Met Ser Leu Thr Ser Ile Ser Gly Arg Val Thr Lys
  1             5             10            15
Asn Leu Ser Ile His Pro Arg Gln Gln Gly Cys Phe Ile Leu Arg Ala
      20             25             30
Arg Leu Gly Phe Glu Gly Asp Phe Ile Arg Met Glu Ser Leu Trp Leu
      35             40             45
Thr Asn Asn Cys Leu Leu Lys Tyr Gln Ala Leu Leu Leu Lys Gly Ser
      50             55             60
Ala Val Gln Leu Lys Thr Cys Pro Cys Leu Ser Pro Ala Thr Phe Ser
      65             70             75            80
Gln Arg Lys Leu Glu Asn Leu Asn Met Ile Val Asn Arg Met Ala Ser
      85             90            95
Gly Gly Leu Gly Leu Leu Gly Glu Thr Glu Asn Ala Pro Gln Ile Pro
      100            105            110
Phe

```

<210> 3772

<211> 850

<212> PRT

<213> Homo sapiens

<400> 3772

```

Met Ile Ala Asn Ile Ser Pro Ser His Val Ala Thr Glu His Thr Leu
  1             5             10            15
Asn Thr Leu Arg Tyr Ala Asp Arg Val Lys Glu Leu Lys Lys Gly Ile
      20             25             30
Lys Cys Cys Thr Ser Val Thr Ser Arg Asn Arg Thr Ser Gly Asn Ser
      35             40             45
Ser Pro Lys Arg Ile Gln Ser Ser Pro Gly Ala Leu Ser Glu Asp Lys

```

50	55	60
Cys Ser Pro Lys Lys Val Lys Leu Gly Phe Gln Gln Ser Leu Thr Val		
65	70	75
Ala Ala Pro Gly Ser Thr Arg Gly Lys Val His Pro Leu Thr Ser His		
85	90	95
Pro Pro Asn Ile Pro Phe Thr Ser Ala Pro Lys Val Ser Gly Lys Arg		
100	105	110
Gly Gly Ser Arg Gly Ser Pro Ser Gln Glu Trp Val Ile His Ala Ser		
115	120	125
Pro Val Lys Gly Thr Val Arg Ser Gly His Val Ala Lys Lys Lys Pro		
130	135	140
Glu Glu Ser Ala Pro Leu Cys Ser Glu Lys Asn Arg Met Gly Asn Lys		
145	150	155
Thr Val Leu Gly Trp Glu Ser Arg Ala Ser Gly Pro Gly Glu Gly Leu		
165	170	175
Val Arg Gly Lys Leu Ser Thr Lys Cys Lys Lys Val Gln Thr Val Gln		
180	185	190
Pro Val Gln Lys Gln Leu Val Ser Arg Val Glu Leu Ser Phe Gly Asn		
195	200	205
Ala His His Arg Ala Glu Tyr Ser Gln Asp Ser Gln Arg Gly Thr Pro		
210	215	220
Ala Arg Pro Ala Ser Glu Ala Trp Thr Asn Ile Pro Pro His Gln Lys		
225	230	235
Glu Arg Glu Glu His Leu Arg Phe Tyr His Gln Gln Phe Gln Gln Pro		
245	250	255
Pro Leu Leu Gln Gln Lys Leu Lys Tyr Gln Pro Leu Lys Arg Ser Leu		
260	265	270
Arg Gln Tyr Arg Pro Pro Glu Gly Gln Leu Thr Asn Glu Thr Pro Pro		
275	280	285
Leu Phe His Ser Tyr Ser Glu Asn His Asp Gly Ala Gln Val Glu Glu		
290	295	300
Leu Asp Asp Ser Asp Phe Ser Glu Asp Ser Phe Ser His Ile Phe Ser		
305	310	315
Gln Arg Ala Thr Lys Gln Arg Asn Thr Leu Glu Asn Ser Glu Asp Ser		
325	330	335
Phe Phe Leu His Gln Thr Trp Gly Gln Gly Pro Glu Lys Gln Val Ala		

340	345	350
Glu Arg Gln Gln Ser Leu Phe Ser Ser Pro Arg Thr Gly Asp Lys Lys		
355	360	365
Asp Leu Thr Lys Ser Trp Val Asp Ser Arg Asp Pro Ile Asn His Arg		
370	375	380
Arg Ala Ala Leu Asp His Ser Cys Ser Pro Ser Lys Gly Pro Val Asp		
385	390	395
Trp Ser Arg Glu Asn Ser Thr Ser Ser Gly Pro Ser Pro Arg Asp Ser		
405	410	415
Leu Ala Glu Lys Pro Tyr Cys Ser Gln Val Asp Phe Ile Tyr Arg Gln		
420	425	430
Glu Arg Gly Gly Gly Ser Ser Phe Asp Leu Arg Lys Asp Ala Ser Gln		
435	440	445
Ser Glu Val Ser Gly Glu Asn Glu Gly Asn Leu Pro Ser Pro Glu Glu		
450	455	460
Asp Gly Phe Thr Ile Ser Leu Ser His Val Ala Val Pro Gly Ser Pro		
465	470	475
Asp Gln Arg Asp Thr Val Thr Thr Pro Leu Arg Glu Val Ser Ala Asp		
485	490	495
Gly Pro Ile Gln Val Thr Ser Thr Val Lys Asn Gly His Ala Val Pro		
500	505	510
Gly Glu Asp Pro Arg Gly Gln Leu Gly Thr His Ala Glu Tyr Ala Ser		
515	520	525
Gly Leu Met Ser Pro Leu Thr Met Ser Leu Leu Glu Asn Pro Asp Asn		
530	535	540
Glu Gly Ser Pro Pro Ser Glu Gln Leu Val Gln Asp Gly Ala Thr His		
545	550	555
Ser Leu Val Ala Glu Ser Thr Gly Gly Pro Val Val Ser His Thr Val		
565	570	575
Pro Ser Gly Asp Gln Glu Ala Ala Leu Pro Val Ser Ser Ala Thr Arg		
580	585	590
His Leu Trp Leu Ser Ser Ser Pro Pro Asp Asn Lys Pro Gly Gly Asp		
595	600	605
Leu Pro Ala Leu Ser Pro Ser Pro Ile Arg Gln His Pro Ala Asp Lys		
610	615	620

Leu Pro Ser Arg Glu Ala Asp Leu Gly Glu Ala Cys Gln Ser Arg Glu
 625 630 635 640
 Thr Val Leu Phe Ser His Glu His Met Gly Ser Glu Gln Tyr Asp Ala
 645 650 655
 Asp Ala Glu Glu Thr Gly Leu Asp Gly Ser Trp Gly Phe Pro Gly Lys
 660 665 670
 Pro Phe Thr Thr Ile His Met Gly Val Pro His Ser Gly Pro Thr Leu
 675 680 685
 Thr Pro Arg Thr Gly Ser Ser Asp Val Ala Asp Gln Leu Trp Ala Gln
 690 695 700
 Glu Arg Lys His Pro Thr Arg Leu Gly Trp Gln Glu Phe Gly Leu Ser
 705 710 715 720
 Thr Asp Pro Ile Lys Leu Pro Cys Asn Ser Glu Asn Val Thr Trp Leu
 725 730 735
 Lys Pro Arg Pro Ile Ser Arg Cys Leu Ala Arg Pro Ser Ser Pro Leu
 740 745 750
 Val Pro Ser Cys Ser Pro Lys Thr Ala Gly Thr Leu Arg Gln Pro Thr
 755 760 765
 Leu Glu Gln Ala Gln Gln Val Val Ile Arg Ala His Gln Glu Gln Leu
 770 775 780
 Asp Glu Met Ala Glu Leu Gly Phe Lys Glu Glu Thr Leu Met Ser Gln
 785 790 795 800
 Leu Ala Ser Asn Asp Phe Glu Asp Phe Val Thr Gln Leu Asp Glu Ile
 805 810 815
 Met Val Leu Lys Ser Lys Cys Ile Gln Ser Leu Arg Ser Gln Leu Gln
 820 825 830
 Leu Tyr Leu Thr Cys His Gly Pro Thr Ala Ala Pro Glu Gly Thr Val
 835 840 845
 Pro Ser
 850

<210> 3773

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3773

Met Arg Gly Leu Pro Val Cys Leu Ala Gln Asn Ser Ser Pro Ala Pro
 1 5 10 15
 Val Asn Thr Trp Leu Ala Thr Ala Leu Lys Pro Arg Gly Leu Ser Thr
 20 25 30
 Thr Pro Gly Gly Gly Gly Leu Lys Arg Lys Gly Gln Lys Gln Val Ala
 35 40 45
 Ser Ala Gly Gln Val Gln Trp Gly Phe Ser Gln Thr His Thr Ile Lys
 50 55 60
 Cys Val Cys Arg Leu Thr Val Ser Pro Ala Gly Gly Phe Gln Gly Pro
 65 70 75 80
 Pro Val Ser Leu Leu Ser Trp Asp Met Tyr Leu Leu Ile Met Pro Leu
 85 90 95
 Ser Met Leu Trp Leu Met
 100

<210> 3774

<211> 243

<212> PRT

<213> Homo sapiens

<400> 3774

Met Met Gly Ser Arg Arg Lys Val Leu Leu Thr Ser Gln Met Gly Gln
 1 5 10 15
 Leu Gly Lys Gly Ala Pro His Phe Pro Asp Gly Val Ala Val Arg Gln
 20 25 30
 Arg Cys Ser Ser Gln Pro Arg Arg Gly Ser Gln Ala Val Ala Leu Leu
 35 40 45
 Thr Ser Gln Thr Gly Leu Pro Gly Arg Gly Ala Pro His Phe Pro Glu
 50 55 60
 Gly Val Ala Gly Gln Arg Arg Ser Ser Thr Ala Arg Leu Gly Ser Arg
 65 70 75 80
 Gln Glu Glu Leu Leu Thr Ser Lys Met Met Gly Gly Arg Ala Glu Ala

	85		90		95										
Leu	Pro	Thr	Ser	Gln	Thr	Gly	Arg	Pro	Gly	Arg	Gly	Ala	Pro	His	Leu
	100							105					110		
Pro	Asp	Arg	Val	Ala	Gly	Gln	Arg	Arg	Ser	Ser	Pro	Pro	Arg	Arg	Gly
	115						120						125		
Gly	Arg	Ala	Glu	Ala	Leu	His	Thr	Ser	Gln	Met	Gly	Trp	Trp	Pro	Asp
	130					135					140				
Arg	Gly	Ala	Pro	His	Asn	Leu	Asp	Gly	Ala	Ala	Gly	Gln	Arg	His	Ser
145				150					155					160	
Pro	Leu	Pro	Arg	Arg	Gly	Ser	Arg	Ala	Glu	Trp	Pro	Gly	Arg	Gly	Thr
			165				170					175			
Pro	His	Asn	Pro	Asp	Gly	Ala	Ala	Gly	Gln	Arg	Arg	Ser	Ser	Pro	Pro
	180						185					190			
Arg	Trp	Gly	Ser	Arg	Glu	Glu	Ala	Leu	Leu	Thr	Ser	Gln	Thr	Leu	Gly
	195					200					205				
Gly	Gln	Ala	Glu	Ala	Leu	Leu	Thr	Ser	Gln	Met	Gly	Trp	Leu	Gly	Arg
	210					215					220				
Gly	Ala	Pro	His	Phe	Pro	Asp	Lys	Val	Ala	Gly	Gln	Arg	Arg	Tyr	Ser
225				230					235					240	
Pro	Pro	Arg													

<210> 3775

<211> 281

<212> PRT

<213> Homo sapiens

<400> 3775

Met	Gly	Glu	Thr	Gln	Gly	Pro	Gly	Pro	Gln	Phe	Ser	Val	Leu	Cys	Pro
1				5				10					15		
Ser	Ser	Val	His	Leu	Cys	Asn	Asn	Ser	Ile	Gln	Lys	His	Leu	Glu	Asn
		20					25					30			
Ser	Cys	His	Arg	His	Pro	Leu	Leu	Pro	Pro	Asp	Asn	Met	Trp	Ser	Ser
	35					40						45			

Gln Arg Phe Gln Ala His Leu Gln Glu Met Gly Ala Pro Asn Ala Trp
 50 55 60
 Ser Thr Ile Ile Val Pro Gly Met Lys Asp Ala Val Ile His Ala Leu
 65 70 75 80
 Gln Thr Ser Gln Asp Thr Val Gln Cys Arg Lys Ala Ser Phe Glu Leu
 85 90 95
 Tyr Gly Ala Asp Phe Val Phe Gly Glu Asp Phe Gln Pro Trp Leu Ile
 100 105 110
 Glu Ile Asn Ala Ser Pro Thr Met Ala Pro Ser Thr Ala Val Thr Ala
 115 120 125
 Arg Leu Cys Ala Gly Val Gln Ala Asp Thr Leu Arg Val Val Ile Asp
 130 135 140
 Arg Arg Leu Asp Arg Asn Cys Asp Thr Gly Ala Phe Glu Leu Ile Tyr
 145 150 155 160
 Lys Gln Pro Ala Val Glu Val Pro Gln Tyr Val Gly Ile Arg Leu Leu
 165 170 175
 Val Glu Gly Phe Thr Ile Lys Lys Pro Met Ala Met Cys His Arg Arg
 180 185 190
 Met Gly Val Arg Pro Ala Val Pro Leu Leu Thr Gln Arg Gly Ser Gly
 195 200 205
 Glu Ala Glu Val Ser Gly Ser Leu Arg Lys Leu Pro Lys Val Ala Gln
 210 215 220
 Leu Arg Arg Gly Thr Ala Gly Met Gln Thr Gln Pro Val Thr Thr Ser
 225 230 235 240
 Pro Ala Ser Thr Pro Arg Pro Ser Cys Leu Leu Pro Met Tyr Ser Asp
 245 250 255
 Thr Arg Ala Arg Ser Ser Asp Asp Ser Thr Ala Ser Trp Trp Ala Leu
 260 265 270
 Arg Pro Cys Arg Pro Gln Ala Arg Pro
 275 280

<210> 3776

<211> 470

<212> PRT

<213> Homo sapiens

<400> 3776

Met Asn Glu Glu Asn Ile Asp Gly Thr Asn Gly Cys Ser Lys Val Arg
 1 5 10 15
 Thr Gly Ile Gln Asn Glu Ala Ala Leu Leu Ala Leu Met Glu Lys Thr
 20 25 30
 Gly Tyr Asn Met Val Gln Glu Asn Gly Gln Arg Lys Phe Gly Gly Pro
 35 40 45
 Pro Pro Gly Trp Glu Gly Pro Pro Pro Arg Gly Cys Glu Val Phe
 50 55 60
 Val Gly Lys Ile Pro Arg Asp Met Tyr Glu Asp Glu Leu Val Pro Val
 65 70 75 80
 Phe Glu Arg Ala Gly Lys Ile Tyr Glu Phe Arg Leu Met Met Glu Phe
 85 90 95
 Ser Gly Glu Asn Arg Gly Tyr Ala Phe Val Met Tyr Thr Thr Lys Glu
 100 105 110
 Glu Ala Gln Leu Ala Ile Arg Ile Leu Asn Asn Tyr Glu Ile Arg Pro
 115 120 125
 Gly Lys Phe Ile Gly Val Cys Val Ser Leu Asp Asn Cys Arg Leu Phe
 130 135 140
 Ile Gly Ala Ile Pro Lys Glu Lys Lys Lys Glu Glu Ile Leu Asp Glu
 145 150 155 160
 Met Lys Lys Val Thr Glu Gly Val Val Asp Val Ile Val Tyr Pro Ser
 165 170 175
 Ala Thr Asp Lys Thr Lys Asn Arg Gly Phe Ala Phe Val Glu Tyr Glu
 180 185 190
 Ser His Arg Ala Ala Ala Met Ala Arg Arg Lys Leu Ile Pro Gly Thr
 195 200 205
 Phe Gln Leu Trp Gly His Thr Ile Gln Val Asp Trp Ala Asp Pro Glu
 210 215 220
 Lys Glu Val Asp Glu Glu Thr Met Gln Arg Val Lys Val Leu Tyr Val
 225 230 235 240
 Arg Asn Leu Met Ile Ser Thr Thr Glu Glu Thr Ile Lys Ala Glu Phe
 245 250 255
 Asn Lys Phe Lys Pro Gly Ala Val Glu Arg Val Lys Lys Leu Arg Asp
 260 265 270

Tyr Ala Phe Val His Phe Phe Asn Arg Glu Asp Ala Val Ala Ala Met
 275 280 285
 Ser Val Met Asn Gly Lys Cys Ile Asp Gly Ala Ser Ile Glu Val Thr
 290 295 300
 Leu Ala Lys Pro Val Asn Lys Glu Asn Thr Trp Arg Gln His Leu Asn
 305 310 315 320
 Gly Gln Ile Ser Pro Asn Ser Glu Asn Leu Ile Val Phe Ala Asn Lys
 325 330 335
 Glu Glu Ser His Pro Lys Thr Leu Gly Lys Leu Pro Thr Leu Pro Ala
 340 345 350
 Arg Leu Asn Gly Gln His Ser Pro Ser Pro Pro Glu Val Glu Arg Cys
 355 360 365
 Thr Tyr Pro Phe Tyr Pro Gly Thr Lys Leu Thr Pro Ile Ser Met Tyr
 370 375 380
 Ser Leu Lys Ser Asn His Phe Asn Ser Ala Val Met His Leu Asp Tyr
 385 390 395 400
 Tyr Cys Asn Lys Asn Asn Trp Ala Pro Pro Glu Tyr Tyr Leu Tyr Ser
 405 410 415
 Thr Thr Ser Gln Asp Gly Lys Val Leu Leu Val Tyr Lys Ile Val Ile
 420 425 430
 Pro Ala Ile Ala Asn Gly Ser Gln Ser Tyr Phe Met Pro Asp Lys Leu
 435 440 445
 Cys Thr Thr Leu Glu Asp Ala Lys Glu Leu Ala Ala Gln Phe Thr Leu
 450 455 460
 Leu His Leu Gly Pro Phe
 465 470

<210> 3777

<211> 382

<212> PRT

<213> Homo sapiens

<400> 3777

Met Phe Cys Leu Glu Ala Ile Val Lys His Ser Glu Ile Ser Thr His
 1 5 10 15

Cys Asp Lys Ile Glu Ala Asn Gly Gly Leu Gln Leu Leu Gln Arg Leu
 20 25 30
 Tyr Arg Leu His Lys Asp Cys Pro Lys Val Gln Arg Asn Ile Met Arg
 35 40 45
 Val Ile Gly Asn Met Ala Leu Asn Glu His Leu His Ser Ser Ile Val
 50 55 60
 Arg Ser Gly Trp Val Ser Ile Met Ala Glu Ala Met Lys Ser Pro His
 65 70 75 80
 Ile Met Glu Ser Ser His Ala Ala Arg Ile Leu Ala Asn Leu Asp Arg
 85 90 95
 Glu Thr Val Gln Glu Lys Tyr Gln Asp Gly Val Tyr Val Leu His Pro
 100 105 110
 Gln Tyr Arg Thr Ser Gln Pro Ile Lys Ala Asp Val Leu Phe Ile His
 115 120 125
 Gly Leu Met Gly Ala Ala Phe Lys Thr Trp Arg Gln Gln Asp Ser Glu
 130 135 140
 Gln Ala Val Ile Glu Lys Pro Met Glu Asp Glu Asp Arg Tyr Thr Thr
 145 150 155 160
 Cys Trp Pro Lys Thr Trp Leu Ala Lys Asp Cys Pro Ala Leu Arg Ile
 165 170 175
 Ile Ser Val Glu Tyr Asp Thr Ser Leu Ser Asp Trp Arg Ala Arg Cys
 180 185 190
 Pro Met Glu Arg Lys Ser Ile Ala Phe Arg Ser Asn Glu Leu Leu Arg
 195 200 205
 Lys Leu Arg Ala Ala Gly Val Gly Asp Arg Pro Val Val Trp Ile Ser
 210 215 220
 His Ser Met Gly Gly Leu Leu Val Lys Lys Met Leu Leu Glu Ala Ser
 225 230 235 240
 Thr Lys Pro Glu Met Ser Thr Val Ile Asn Asn Thr Arg Gly Ile Ile
 245 250 255
 Phe Tyr Ser Val Pro His His Gly Ser Arg Leu Ala Glu Tyr Ser Val
 260 265 270
 Asn Ile Arg Tyr Leu Leu Phe Pro Ser Leu Glu Val Lys Glu Leu Ser
 275 280 285
 Lys Asp Ser Pro Ala Leu Lys Thr Leu Gln Asp Asp Phe Leu Glu Phe
 290 295 300

Ala	Lys	Asp	Lys	Asn	Phe	Gln	Val	Leu	Asn	Phe	Val	Glu	Thr	Leu	Pro
305					310					315					320
Thr	Tyr	Ile	Gly	Ser	Met	Ile	Lys	Leu	His	Val	Val	Pro	Val	Glu	Ser
				325					330					335	
Ala	Asp	Leu	Gly	Ile	Gly	Asp	Leu	Ile	Pro	Val	Asp	Val	Asn	His	Leu
			340					345					350		
Asn	Ile	Cys	Lys	Pro	Lys	Lys	Lys	Asp	Ala	Phe	Leu	Tyr	Gln	Arg	Thr
		355					360					365			
Leu	Gln	Phe	Ile	Arg	Glu	Ala	Leu	Ala	Lys	Asp	Leu	Glu	Asn		
370						375					380				

<210> 3778

<211> 164

<212> PRT

<213> Homo sapiens

<400> 3778

Met	Phe	Gln	Arg	Leu	Asn	Lys	Met	Phe	Val	Gly	Glu	Val	Ser	Ser	Ser
1				5					10					15	
Ser	Asn	Gln	Glu	Pro	Glu	Phe	Asn	Glu	Lys	Glu	Asp	Asp	Glu	Trp	Ile
			20					25					30		
Leu	Val	Asp	Phe	Ile	Asp	Thr	Cys	Thr	Gly	Phe	Ser	Ala	Glu	Gly	Glu
		35					40					45			
Glu	Glu	Glu	Glu	Asp	Ile	Ser	Glu	Glu	Ser	Pro	Thr	Glu	His	Pro	Ser
	50					55				60					
Val	Phe	Ser	Cys	Leu	Pro	Ala	Ser	Leu	Glu	Cys	Leu	Ala	Asp	Thr	Ser
65				70					75					80	
Asp	Ser	Cys	Phe	Leu	Gln	Phe	Glu	Ser	Cys	Pro	Met	Glu	Glu	Ser	Trp
			85					90					95		
Phe	Ile	Thr	Pro	Pro	Pro	Cys	Phe	Thr	Ala	Gly	Gly	Leu	Thr	Thr	Ile
		100						105				110			
Lys	Val	Glu	Thr	Ser	Pro	Met	Glu	Asn	Leu	Leu	Ile	Glu	His	Pro	Ser
	115					120				125					
Met	Ser	Val	Tyr	Ala	Val	His	Asn	Ser	Cys	Pro	Gly	Leu	Ser	Glu	Ala
130						135				140					

Thr Arg Gly Thr Asp Glu Leu His Ser Pro Ser Ser Pro Arg Ala Arg
 145 150 155 160
 Lys Ser Cys Leu

<210> 3779

<211> 252

<212> PRT

<213> Homo sapiens

<400> 3779

Met Trp Pro Asp Gly Ser Ser Phe Thr Gly Thr Phe Tyr Leu Ser His
 1 5 10 15
 Arg Glu Gly Tyr Gly Thr Met Tyr Met Lys Thr Arg Leu Phe Gln Thr
 20 25 30
 His Cys His Asn Asp Ile Val Asn Leu Leu Leu Asp Cys Gly Ala Asp
 35 40 45
 Val Asn Lys Cys Ser Asp Glu Gly Leu Thr Ala Leu Ser Met Cys Phe
 50 55 60
 Leu Leu His Tyr Pro Ala Gln Ser Phe Lys Pro Asn Val Ala Glu Arg
 65 70 75 80
 Thr Ile Pro Glu Pro Gln Glu Pro Pro Lys Phe Pro Val Val Pro Ile
 85 90 95
 Leu Ser Ser Ser Phe Met Asp Thr Asn Leu Glu Ser Leu Tyr Tyr Glu
 100 105 110
 Val Asn Val Pro Ser Gln Gly Ser Tyr Glu Leu Arg Pro Pro Pro Ala
 115 120 125
 Pro Leu Leu Leu Pro Arg Val Ser Gly Ser His Glu Gly Gly His Phe
 130 135 140
 Gln Asp Thr Gly Gln Cys Gly Gly Ser Met Asp His Arg Ser Ser Ser
 145 150 155 160
 Leu Lys Gly Asp Ser Pro Leu Val Lys Gly Ser Leu Gly His Val Glu
 165 170 175
 Ser Gly Leu Glu Asp Val Leu Gly Asn Thr Asp Arg Gly Ser Leu Cys
 180 185 190

Ser Ala Glu Thr Lys Phe Glu Ser Asn Val Cys Val Cys Asp Phe Ser
 195 200 205
 Ile Glu Leu Ser Gln Ala Met Leu Glu Arg Ser Ala Gln Ser His Ser
 210 215 220
 Leu Leu Lys Met Ala Ser Pro Ser Pro Cys Thr Ser Ser Phe Asp Lys
 225 230 235 240
 Gly Thr Met Arg Arg Met Ala Leu Ser Met Ile Glu
 245 250

<210> 3780

<211> 125

<212> PRT

<213> Homo sapiens

<400> 3780

Met Phe Cys Phe Asp Asn Thr Phe Ser Thr Ile Ser Glu Lys Val Ile
 1 5 10 15
 Phe Phe Glu Leu Ile Leu Asp Asn Met Gly Glu Gln Ala Gln Glu Gln
 20 25 30
 Glu Asp Trp Lys Lys Tyr Ile Thr Gly Thr Asp Ile Leu Asp Met Lys
 35 40 45
 Leu Glu Asp Ile Leu Glu Ser Ile Asn Ser Ile Lys Ser Arg Leu Ser
 50 55 60
 Lys Ser Gly His Ile Gln Ile Leu Leu Arg Ala Phe Glu Ala Arg Asp
 65 70 75 80
 Arg Asn Ile Gln Glu Ser Asn Phe Asp Arg Val Asn Phe Trp Ser Met
 85 90 95
 Val Asn Leu Val Val Met Val Val Val Ser Ala Ile Gln Val Tyr Met
 100 105 110
 Leu Lys Ser Leu Phe Glu Asp Lys Arg Lys Ser Arg Thr
 115 120 125

<210> 3781

<211> 179

<212> PRT

<213> Homo sapiens

<400> 3781

Met Ser Cys Ser Pro Asn Arg Ala Gly His Ser Trp Glu Lys Arg Gly
 1 5 10 15
 Gln Pro Leu Gly Val Val Arg Pro Leu Pro Ala Pro Thr Leu Ser Leu
 20 25 30
 Val Leu Leu Ser Trp Ser Pro Pro Ile Ala Ser Val Val Pro His Asn
 35 40 45
 Arg Val Trp Leu Cys Ala Gly Pro Gly Ser Gln Glu Ser Leu Pro Ser
 50 55 60
 Glu Arg Glu Cys Val Phe Leu Leu Pro Leu Pro Phe Pro Ser Met Ala
 65 70 75 80
 Leu Leu Leu Pro Ser Pro Arg Thr Ser Pro Ser Leu Gly Asp Ala Phe
 85 90 95
 Cys Ser Leu Gln Pro Cys Pro Leu Leu Ser Phe Arg Val Ser Arg Glu
 100 105 110
 Pro Leu Arg Ile Ala Thr Cys Arg Gly Ala Val Leu Ser Pro Gln Phe
 115 120 125
 Leu Ser Leu Trp Tyr Leu Met Leu Leu Thr Thr Ala Ser Phe Leu Thr
 130 135 140
 Ser Gly Phe Leu Thr Pro Phe Pro Ala Cys Ala Leu Ala Ala Ser Pro
 145 150 155 160
 Pro Cys Thr Gly Phe Arg Gly Cys Ser Ala Pro Gly Ala Ala Gln Ala
 165 170 175
 Cys Pro Leu

<210> 3782

<211> 1028

<212> PRT

<213> Homo sapiens

<400> 3782

Met Asp Asp Gln Tyr Arg Thr Leu Met Arg Ile Ser Val Ala Asp Pro
 1 5 10 15
 Met Val Leu Ser Leu Val Val Pro Ser Ala Glu Arg Ser Pro Tyr Phe
 20 25 30
 Gln Gly Gln Gln Leu Gln Gln Leu Leu Gln Ala Gly Ser Val Glu Leu
 35 40 45
 Glu Gly Ile Ile Met Ser Leu Glu Ser Val Leu Tyr Gly Val Cys Ala
 50 55 60
 His Phe Pro Arg Leu Phe Phe Leu Ser Asp Ser Glu Leu Val Ala Leu
 65 70 75 80
 Leu Ala Ala Arg Leu Glu Ser Cys Glu Ala Gln Leu Trp Val Arg Arg
 85 90 95
 Cys Phe Pro His Val His Ala Val Ser Phe Arg Ser Cys Pro Thr Gly
 100 105 110
 Glu Lys Asn Thr Asp Asp Trp Glu Ser Ser Pro Asn Thr Gln Thr Gln
 115 120 125
 Val Glu Ala Leu Ala Val Leu Gly Ala Gly Gly Glu Glu Val Lys Leu
 130 135 140
 Gln Gly Pro Leu Pro Leu His Pro Asp Leu Pro Lys Trp Leu Ala Ser
 145 150 155 160
 Leu Glu Lys Cys Leu Arg Leu Ala Leu Val His Met Leu Gln Gly Cys
 165 170 175
 Val Ala Ala Arg Leu Ala Arg Gly Pro Ser Leu Gly Glu Ala Leu Lys
 180 185 190
 Gln Leu Pro Lys Gln Asn Lys Leu Tyr Leu Gln Leu Tyr Val Gln His
 195 200 205
 Trp Ile Asp Leu Val Gln Ala Phe Pro Trp Gln Cys Val Leu Val Ala
 210 215 220
 Glu Glu Val Val Trp Arg Ala Glu Met Glu Glu Ala Leu Leu Glu Trp
 225 230 235 240
 Gly Thr Leu Ala Met Val Ser Met His Met Arg Lys Leu Glu Val Leu
 245 250 255
 Val Asn Phe Met Arg Ala Gln Arg Ala Ser Gln Gly Gly Gln Ser Leu
 260 265 270
 Pro Ser Val Arg Gln Thr Ser Leu Leu Ser Ala Leu Leu Val Met Ala
 275 280 285

Val Thr His Arg Asp Ile Ala Gln Leu Leu Glu Gln His Gln Val Ser
290 295 300
Asp Leu Thr Asp Phe His Trp Val Arg Gln Leu Lys Tyr His Leu Gly
305 310 315 320
Ser Pro His Ile Ile Pro Lys Ser Pro Leu Gln Ser Leu Lys Thr Ile
325 330 335
Ala Ser Ser Glu Pro Ser Leu Ser Pro Ala Ala Cys Trp Ile Asp Val
340 345 350
Leu Gly Arg Ser Phe Leu Tyr Asn Tyr Glu Tyr Leu Gly Pro Arg Leu
355 360 365
Gly Pro Leu Pro Ser Leu Leu Pro Glu Arg Pro Ala Leu Val Leu Leu
370 375 380
Leu Ala Leu Glu Glu Val Ala Cys Gly Thr Val Leu Gly Pro Asn Gly
385 390 395 400
Val Gly Lys Arg Ala Ile Val Asn Ser Leu Ala Gln Ala Leu Gly Arg
405 410 415
Gln Leu Val Met Leu Pro Cys Ser Pro Gln Ile Glu Ala Gln Cys Leu
420 425 430
Ser Asn Tyr Leu Asn Gly Ala Leu Gln Gly Gly Ala Trp Leu Leu Leu
435 440 445
Glu Lys Val His Gln Leu Pro Pro Gly Leu Leu Ser Ala Leu Gly Gln
450 455 460
Arg Leu Gly Glu Leu His His Leu Tyr Ala Pro Leu Tyr Gln Glu Ala
465 470 475 480
Ser Arg Asn Thr Ser Thr Ile Asp Pro Thr Gln Pro Gln Leu Leu Gly
485 490 495
Ser Ser Phe Phe Glu Lys His His Val Ser Val Arg Leu Gly Tyr Gly
500 505 510
Cys Leu Leu Val Leu Arg Ala Leu Ser Ser Ala Val Pro Ala Asn Leu
515 520 525
His Leu Leu Leu Arg Pro Val Ala Leu Ala Leu Pro Asp Leu Arg Gln
530 535 540
Val Ala Glu Leu Thr Leu Leu Gly Ala Gly Met Arg Asp Ala Phe Gln
545 550 555 560
Met Ala Thr Arg Leu Ser Lys Phe Phe Ser Leu Glu Arg Glu Leu Val
565 570 575

Ser Gly Pro Leu Pro Cys Arg Leu Pro Leu Leu Lys Gln Ile Leu Glu
 580 585 590
 Asp Thr Ile Arg Thr Leu Asn Val Thr Lys Glu Glu Pro Lys Cys Gln
 595 600 605
 Lys Pro Arg Ser Leu Ala Ala Ile Glu Glu Ala Ala Leu Leu His Ala
 610 615 620
 Leu Leu Arg Ser Pro Leu Phe Ser Ile Leu Asn Gly Leu His Leu His
 625 630 635 640
 Asn Leu Arg Gly Leu Leu Cys Ala Leu Phe Pro Ser Ala Ser Gln Val
 645 650 655
 Leu Ala Glu Pro Met Thr Tyr Lys Leu Met Lys Pro Leu Val Val Glu
 660 665 670
 Glu Leu Gln Gln Val Gly Leu Asp Pro Ser Pro Asp Ile Leu Gly Ser
 675 680 685
 Leu Glu Gln Leu Ser Gln Ala Leu Ser Arg Ala Ser Gly Ile Leu Leu
 690 695 700
 Leu Gly Pro Ala Gly Ser Gly Lys Thr Ile Cys Trp His Ser Leu Phe
 705 710 715 720
 Lys Ile Gln Asn Arg Leu Ala Ala Met Glu Asp Thr Ser Thr Gln Gly
 725 730 735
 Cys Gln Pro Val Glu Ile Thr His Leu Tyr Pro Ser Gly Leu Ser Pro
 740 745 750
 Gln Glu Phe Leu Gly Trp Leu Glu Gly Ser Cys Trp His His Gly Ile
 755 760 765
 Phe Pro Lys Val Leu Arg Ala Ala Gly Gln Cys Asn Asn Met Gly Gln
 770 775 780
 Lys Arg Gln Thr Glu Glu Ser Ile Gly Ile Gln His Trp Ile Ile Cys
 785 790 795 800
 Asp Gly Ala Ser Asn Gly Ala Trp Leu Asp Ser Ile Thr Cys Leu Leu
 805 810 815
 Ser Glu Leu Pro Gln Leu Ser Leu Pro Ser Gly Gln Gln Ile Ala Arg
 820 825 830
 Pro Pro Gly Thr Phe Leu Leu Met Glu Val Ala Asp Thr Thr Gly Ile
 835 840 845
 Ser Pro Thr Val Val Gly Cys Cys Ala Leu Val Trp Cys Gly Gly Glu
 850 855 860

Gln Thr Trp Gln Cys Ile Leu Ser Ala Leu Met Ala Ser Leu Pro Tyr
 865 870 875 880
 Glu Tyr Arg Leu Gln His Arg Thr Val Ala Glu Leu Asn His Met Ala
 885 890 895
 Glu Val Leu Val Pro Ala Thr Leu Arg Phe Leu Thr Cys Gln Gly Val
 900 905 910
 Ser Ser Leu Leu Gln Val His Gly Gln Gln Ala Val Cys Ala Gly Val
 915 920 925
 Ala Glu Val Thr Ser Met Ala Arg Ile Leu His Ser Leu Leu Asp Leu
 930 935 940
 His Leu Arg Leu Lys Glu Glu Lys Ala Pro Gly Pro Glu Asp Leu Ser
 945 950 955 960
 Tyr Ser Asp Pro Val Ala Gln Ser Phe Arg Ser Ser Lys Ser Ser Phe
 965 970 975
 Leu Asn Arg Ser Gln Val Asp Ser Asp Asp Val Pro Asp Lys Cys Arg
 980 985 990
 Glu His Leu Leu Ala Val Ser Ser Phe Leu Phe Ala Leu Ile Trp Gly
 995 1000 1005
 Phe Gly Ala His Leu Pro Ser Arg Tyr Leu Pro Gly Trp Gly Met Gly
 1010 1015 1020
 Asp Ala Glu Gly
 1025

<210> 3783

<211> 119

<212> PRT

<213> Homo sapiens

<400> 3783

Met Asn His Ala Ser Cys Asn Thr Phe Ser Gln Thr Glu Thr Pro Lys
 1 5 10 15
 Tyr Ala Cys Asn Val Leu Thr Lys Lys Glu Ala Ile Val Gln Leu Ala
 20 25 30
 Lys His Leu Asn Leu Phe Arg Val Arg Glu Glu Ser Ser Asn Cys Leu
 35 40 45

Asp Val Thr Trp Arg Glu Gly Cys Gly Lys His His Ser Leu Gln Ala
 50 55 60
 Pro Phe Ser Leu Cys Glu Ala Phe Ser Lys Met Gln Pro Ala Leu Thr
 65 70 75 80
 His Gln Ala Trp Phe Cys Ser Pro Cys His Arg Asp Pro Ala Gly Ser
 85 90 95
 Leu Ala Met Arg Arg Cys Asn Cys Val Ser Cys Gly Leu Leu Gln Lys
 100 105 110
 Asp Trp Pro Pro Pro Gln Thr
 115

<210> 3784

<211> 139

<212> PRT

<213> Homo sapiens

<400> 3784

Met Leu Leu His Gly Leu Ser Gln Ala Arg Pro Ser Val Gly Leu Glu
 1 5 10 15
 Gln Leu Ser Cys Gln Thr Leu Thr Arg Leu Gly Lys Gly Leu Val Thr
 20 25 30
 Gly Gln Phe Pro Ala Cys Arg Ala Pro Asn Cys Cys Ser Arg Gln Val
 35 40 45
 Pro Glu Arg Gln Phe Gln Ile Asn Ala Cys Pro Ser Gln Gly Thr Ala
 50 55 60
 Glu Arg Glu Arg Pro Glu Thr Ala Thr Thr Pro Phe Leu His Pro Leu
 65 70 75 80
 Cys Pro Pro Gly Ile Gln Leu Asn His Leu Leu Leu His Ile Leu Gly
 85 90 95
 Lys Lys Asp Asp Ala Val Leu Gly Pro Pro Ala Ile Asn Asp Arg Gln
 100 105 110
 Leu Phe Asp Leu Ala Gly Ser Gln Val Asp Val Phe Ser Gly Ala Gln
 115 120 125
 Leu Phe Leu Gln Pro Thr Ser Gln Val Asp Ser
 130 135

<210> 3785

<211> 1224

<212> PRT

<213> Homo sapiens

<400> 3785

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Met Thr Cys Thr Lys Asn Pro Gln Asn Leu Asn Gln Ile His Glu Glu
 1             5             10             15
Thr Ala Lys Lys Ala Gln Asn Leu Val Leu Pro Asn Arg Lys Ser Pro
      20             25             30
Ser Pro Val Ala Pro His Pro Ser Thr Phe Val Ala Thr Pro Ala Ser
      35             40             45
His Asn Leu Val Asn Gln Thr Asn Gly Thr Thr Lys Glu Ser Ala Leu
      50             55             60
Leu Leu His Val Leu Leu Met Val Pro Asp Gly Lys Asp Phe Ile Ser
      65             70             75             80
Gly Glu Ser Glu Lys Gln Ser Pro Cys Asn Val Tyr Leu Asn Cys Lys
      85             90             95
Leu Phe Ser Thr Glu Glu Val Thr Arg Ser Val Ile Ala Trp Gly Thr
      100            105            110
Thr Gln Pro Val Phe Asn Phe Ser Gln Val Ile Pro Val Ser Leu Ser
      115            120            125
Ser Lys Tyr Leu Glu Arg Leu Lys Asn Asn Val Met Val Ile Glu Thr
      130            135            140
Trp Asn Lys Val Arg Ser Pro Gly Gln Asp Lys Leu Leu Gly Leu Val
      145            150            155            160
Lys Leu Pro Leu His Gln Phe Tyr Met Ser Phe Lys Asp Ala Lys Ile
      165            170            175
Ser Arg Leu Leu Leu Asp Ala Gln Tyr Pro Val Val Ala Val Asp Ser
      180            185            190
Tyr Met Pro Val Ile Asp Val Phe Ser Gly His Gln Asn Gly Ser Leu
      195            200            205
Arg Val Phe Leu Ala Met Gly Ser Ser Asn Gln Ile Met Ala Leu Gln
      210            215            220

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Arg Leu Lys Asn Glu Glu Gly Thr Leu Pro Pro Phe Ser Pro Arg Pro
 225 230 235 240
 Ala His Phe Leu Asp Gln Pro Thr Ala Ala Ser Val Ala Met Ala Glu
 245 250 255
 Asp Arg Gly Asn Gly Leu Met Glu His Cys Phe Glu Ile His Ile Glu
 260 265 270
 Met Val Lys Gly Leu Ala Pro Leu Gln Ala Thr Val Trp Gly Glu Ala
 275 280 285
 Asp Cys Tyr Val Gln Tyr Tyr Phe Pro Val Gln His Ser Gln Ser Ser
 290 295 300
 Val Leu Lys Gly Pro Glu Phe Leu Glu Asn Gly Ile Thr Leu Lys Pro
 305 310 315 320
 Phe Arg Thr Ala Thr Thr Leu Cys Val Pro Asp Pro Ile Phe Asn Ser
 325 330 335
 Glu His His His Ser Leu Leu Leu Pro Ala Glu Val Pro Val Gln Arg
 340 345 350
 Leu Leu Leu Ser Ala Phe Ser Ala Gln Gly Leu Val Pro Gly Gly Gly
 355 360 365
 Val Gln Phe Glu Ile Trp Cys Arg Tyr Tyr Tyr Pro Asn Val Arg Asp
 370 375 380
 Gln Lys Val Ala Lys Gly Thr Leu Pro Leu Ser Arg Ile Cys Ala Met
 385 390 395 400
 Val Thr Thr Gln His Arg Glu Asp Val Gly Ile Gln Thr Phe Asn Leu
 405 410 415
 Pro Leu Thr Pro Arg Ile Glu Asn Arg Lys Glu Leu Arg Asn Gln Ser
 420 425 430
 Ser Gly Leu Leu Asp Val Gly Leu Arg Tyr Arg Arg Ser Pro Arg Thr
 435 440 445
 Ala Glu Gly Val Leu Ala Ala Arg Thr Val Ser Ile Ser Val Gln Ile
 450 455 460
 Ile Arg Ala Cys Gly Leu Gln Ala Ala Ala Lys Ala Leu Ala Glu Gln
 465 470 475 480
 Glu Pro Ala Leu Gln Phe Ser Ala Thr Val Gly Val Asn Ala Ser Val
 485 490 495
 Thr Thr His Leu Ser Phe Leu Pro Gln Gly Glu Gln Arg Arg Thr His
 500 505 510

Pro Val Ala Cys Ser Phe Cys Pro Glu Phe Ser His His Val Glu Phe
 515 520 525
 Thr Cys Asn Leu Val Thr Gln His Cys Ser Gly Glu Ala Cys Phe Leu
 530 535 540
 Ala Glu Leu Leu Glu Phe Ala Glu Val Ile Phe Ala Val Tyr His Glu
 545 550 555 560
 Asn Thr Lys Ser Ala Ser Asp Ile Ile Ser Ile Glu Ser Cys Lys Glu
 565 570 575
 Tyr Leu Leu Gly Val Val Lys Val Pro Thr Lys Glu Leu Leu Ile Lys
 580 585 590
 Arg Ser Gly Ile Thr Gly Trp Tyr Pro Ile Ile Leu Pro Glu Asp Gly
 595 600 605
 Gly Leu Pro His Gly Leu Glu Leu Met Gln Lys Ile Val Gly Gly Leu
 610 615 620
 Glu Leu Ser Ile Ser Phe Thr His Arg Gly Asp Arg Glu Arg Val Leu
 625 630 635 640
 Glu Ala Ala Glu His Leu Gly Trp Ser Phe Glu Asn Ser Leu Lys Asp
 645 650 655
 Phe Val Arg Met Asp Glu Gly Glu Pro Ala Thr Val Thr Ile Ser Thr
 660 665 670
 Pro Arg Leu Trp Leu Pro Ile His Cys Val Leu Leu Ala Gly His Asn
 675 680 685
 His Ile His Lys Asn Thr Tyr Cys Tyr Leu Arg Tyr Lys Phe Tyr Asp
 690 695 700
 His Glu Ala Phe Trp Thr Pro Leu Lys Lys Pro Lys Glu Ser Val Asn
 705 710 715 720
 Lys Lys Gln Ile Met Val Thr Phe Lys Ala Ser Lys Arg Ala Glu Val
 725 730 735
 Thr Arg Gly Pro Ser Leu Leu Trp Tyr Phe Arg Glu Glu Arg Leu Glu
 740 745 750
 Ile Gln Val Trp Arg Ala Tyr Gly Asn Asp Ser Val Glu Arg Pro His
 755 760 765
 Gln Thr Asp Ser Trp Ile Gly Ser Ala Tyr Val Asp Leu Ala Arg Leu
 770 775 780
 Gly Glu Arg Ser Ala Arg Thr Leu Thr Val Ser Gly Val Tyr Pro Leu
 785 790 795 800

Phe Gly Arg Asn Ala Ser Asn Leu Ser Gly Ala Ala Leu Arg Val His
 805 810 815
 Val Val Leu Ser Ser Leu Ser Ser His Leu Glu Pro Thr His Glu Leu
 820 825 830
 Asp Ser Met Asp Cys Ser Ser His Ser Glu Ser Glu Gln Leu Pro Arg
 835 840 845
 Arg Asn Asp Glu Val Gln Leu Ser Pro Pro Glu Val Ile Ser Cys His
 850 855 860
 Gln Lys Ser Pro Ala Ser Thr Gln Val Pro Cys Ser Ser Thr Thr Ala
 865 870 875 880
 Glu Val Arg Leu Thr Arg Glu Gly Pro Ala Asp Leu Asp Gly Thr Phe
 885 890 895
 Ala Val Ser Ile Leu Val Glu Arg Ala Met His Leu Ser Leu Lys Gly
 900 905 910
 Ser Pro Leu Thr Glu Arg Lys Val Ser Ile Pro Ser Cys Cys Val Ser
 915 920 925
 Phe Ala Thr Ala Asp Glu Ser Ser Pro Val Tyr Thr Gln Val Val Glu
 930 935 940
 Asn Thr Asp Ser Pro Ile Trp Asn Phe Gln Gln Gln Ser Arg Leu Ser
 945 950 955 960

 Lys Glu Leu Leu Leu Asp Pro Gln Gln Thr Leu Val Phe Lys Val Trp
 965 970 975
 His Lys Gly Asp Glu Glu Arg Val Ile Gly Phe Ala Ser Val Asp Leu
 980 985 990
 Ser Pro Leu Leu Ser Gly Phe Gln Phe Val Cys Gly Trp Tyr Asn Ile
 995 1000 1005
 Thr Asp Phe Ser Gly Glu Cys Gln Gly Gln Ile Lys Val Ala Val Ser
 1010 1015 1020
 Pro Leu Glu Ser Leu Ile His Phe Lys Glu Glu Arg Gln Glu Arg Arg
 1025 1030 1035 1040
 Gly Val Glu Thr Ser Lys Ser Leu Ile Pro Ile Tyr Ser Pro Phe Ser
 1045 1050 1055
 Phe Pro Ala Ser Asp Thr Tyr Ala Ala Phe Ser Ser His Met Ala Arg
 1060 1065 1070
 Gln Thr Leu Asp Gln Leu Ala His Ala Ser Ser Lys Glu Leu Asp Phe

1075	1080	1085
Ser Ser Pro Gly Arg Ser Asp Thr Thr Arg Ser Gln Ala Ser Arg His		
1090	1095	1100
Glu Glu His Val Gln Asn Ile Arg Arg Phe His Glu Ser Leu His Leu		
1105	1110	1115
Gln Gly Glu Ala Pro Leu Pro Cys Asp Asp Lys Leu Thr Thr Ser Pro		
1125	1130	1135
Leu Ser Ser Gln Thr Ser Ile Leu Thr Ser Leu Arg Lys Asn Leu Ser		
1140	1145	1150
Glu Leu Asp Gln Ile Gln Arg Tyr Phe Arg Gln Lys Leu Thr Lys Pro		
1155	1160	1165
Phe Leu Pro Leu Ser Pro Gln Thr Gln Thr Ala Ile Ser Gln His Gln		
1170	1175	1180
Glu Ser Cys Arg Asp His Leu Gly Pro Gly Ala Ser Ser Leu Asp Pro		
1185	1190	1195
Gly Ser Gln Cys Ile Leu Glu Lys Ser Ser Asn Leu Val Leu Gln Val		
1205	1210	1215
Ser Ser Leu Ile Thr Gly Ser Tyr		
1220		

<210> 3786

<211> 186

<212> PRT

<213> Homo sapiens

<400> 3786

Met Thr Glu Met Ala Arg Cys Gln Trp Gln Val Pro Pro His Gly Leu
1 5 10 15
Ala Gln Pro Pro Val Cys Ser Gln Gln Gly Gln Thr Thr Arg Trp Gly
20 25 30
Tyr Ser Ile Leu His Leu Leu Leu Cys Arg Ala Pro Gln Gly Thr Asn
35 40 45
Asn Ser Ser Gln Val Trp Pro Phe Pro Thr Leu Ser Pro Gln Leu Val
50 55 60
Ser Ser Ala Tyr Lys Glu Thr Val Thr Ser Ser Ile Phe Trp Lys Gly

65 70 75 80
 Ser Glu Thr Gly Leu Leu Ser Phe Arg Val Ala Thr Arg Phe Ser Ile
 85 90 95
 Leu Gln Thr Leu Gly Thr Thr Ser His Leu Pro Leu Thr Gly Pro Gly
 100 105 110
 Leu Ser Lys Val Ser Gly Ala Gln Asp Val Thr Arg Ala Thr Ser Thr
 115 120 125
 Pro Ser Arg Thr Phe Asp Val Ser Val Asp Leu Ala Phe Gly Val Gln
 130 135 140
 Ile Ile Gln Ala Leu Gln Asn Leu Pro Gln Asp Arg Gly Asn Val Cys
 145 150 155 160
 Leu Leu Gln Gly Thr Trp Phe Lys Leu Glu Arg Lys Val Arg Gln Gln
 165 170 175
 Gly Leu Ser Ser Cys Pro Arg Pro Asn Ala
 180 185

<210> 3787

<211> 773

<212> PRT

<213> Homo sapiens

<400> 3787

Met Glu Glu Glu Leu Asp Lys Met Glu Arg Glu Ala Cys Cys Phe Gly
 1 5 10 15
 Ser Glu Asp Glu Ser Ser Ser Lys Ala Glu Thr Glu Tyr Ser Phe Asp
 20 25 30
 Asp Trp Asp Trp Gln Asn Gly Ser Leu Ser Ser Leu Ser Leu Pro Glu
 35 40 45
 Ser Thr Arg Glu Ala Lys Ser Asn Leu Asn Asn Met Ser Thr Thr Glu
 50 55 60
 Glu Tyr Leu Ile Ser Lys Cys Val Leu Asp Leu Lys Ile Met Gln Thr
 65 70 75 80
 Ile Met His Glu Asn Asp Asp Arg Leu Arg Asn Ile Glu Gln Ile Leu
 85 90 95
 Asp Glu Val Glu Met Lys Gln Lys Glu Gln Glu Glu Arg Met Ser Leu

100	105	110
Trp Ala Thr Ser Arg Glu Phe Thr Asn Ala Tyr Lys Leu Pro Leu Ala		
115	120	125
Val Gly Pro Pro Ser Leu Asn Tyr Ile Pro Pro Val Leu Gln Leu Ser		
130	135	140
Gly Gly Gln Lys Pro Asp Thr Ser Gly Asn Tyr Pro Thr Leu Pro Arg		
145	150	155
Phe Pro Arg Met Leu Pro Thr Leu Cys Asp Pro Gly Lys Gln Asn Thr		
165	170	175
Asp Glu Gln Phe Gln Cys Thr Gln Gly Ala Lys Asp Ser Leu Glu Thr		
180	185	190
Ser Arg Ile Gln Asn Thr Ser Ser Gln Gly Arg Pro Arg Glu Ser Thr		
195	200	205
Ala Gln Ala Lys Ala Thr Gln Phe Asn Ser Ala Leu Phe Thr Leu Ser		
210	215	220
Ser His Arg Gln Gly Pro Ser Ala Ser Pro Ser Cys His Trp Asp Ser		
225	230	235
Thr Arg Met Ser Val Glu Pro Val Ser Ser Glu Ile Tyr Asn Ala Glu		
245	250	255
Ser Arg Asn Lys Asp Asp Gly Lys Val His Leu Lys Trp Lys Met Glu		
260	265	270
Val Lys Glu Met Ala Lys Lys Ala Ala Thr Gly Gln Leu Thr Val Pro		
275	280	285
Pro Trp His Pro Gln Ser Ser Leu Thr Leu Glu Ser Glu Ala Glu Asn		
290	295	300
Glu Pro Asp Ala Leu Leu Gln Pro Pro Ile Arg Ser Pro Glu Asn Thr		
305	310	315
Asp Trp Gln Arg Val Ile Glu Tyr His Arg Glu Asn Asp Glu Pro Arg		
325	330	335
Gly Asn Gly Lys Phe Asp Lys Thr Gly Asn Asn Asp Cys Asp Ser Asp		
340	345	350
Gln His Gly Arg Gln Pro Arg Leu Gly Ser Phe Thr Ser Ile Arg His		
355	360	365
Pro Ser Pro Arg Gln Lys Glu Gln Pro Glu His Ser Glu Ala Phe Gln		
370	375	380
Ala Ser Ser Asp Thr Leu Val Ala Val Glu Lys Ser Tyr Ser His Gln		

385	390	395	400
Ser Met Gln Ser Thr Cys Ser Pro Glu Ser Ser Glu Asp Ile Thr Asp			
405	410	415	
Glu Phe Leu Thr Pro Asp Asp Glu Tyr Phe Tyr Ser Ser Thr Ala Gln			
420	425	430	
Glu Asn Leu Ala Leu Glu Thr Ser Ser Pro Ile Glu Glu Asp Phe Glu			
435	440	445	
Gly Ile Gln Gly Ala Phe Ala Gln Pro Gln Val Ser Gly Glu Glu Lys			
450	455	460	
Phe Gln Met Arg Lys Ile Leu Gly Lys Asn Ala Glu Ile Leu Pro Arg			
465	470	475	480
Ser Gln Phe Gln Pro Val Arg Ser Thr Glu Asp Glu Gln Glu Glu Thr			
485	490	495	
Ser Lys Glu Ser Pro Lys Glu Leu Lys Glu Lys Asp Ile Ser Leu Thr			
500	505	510	
Asp Ile Gln Asp Leu Ser Ser Ile Ser Tyr Glu Pro Asp Ser Ser Phe			
515	520	525	
Lys Glu Ala Ser Cys Lys Thr Pro Lys Ile Asn His Ala Pro Thr Ser			
530	535	540	
Val Ser Thr Pro Leu Ser Pro Gly Ser Val Ser Ser Ala Ala Ser Gln			
545	550	555	560
Tyr Lys Asp Cys Leu Glu Ser Ile Thr Phe Gln Val Lys Thr Glu Phe			
565	570	575	
Ala Ser Cys Trp Asn Ser Gln Glu Phe Ile Gln Thr Leu Ser Asp Asp			
580	585	590	
Phe Ile Ser Val Arg Glu Arg Ala Lys Lys Leu Asp Ser Leu Leu Thr			
595	600	605	
Ser Ser Glu Thr Pro Pro Ser Arg Leu Thr Gly Leu Lys Arg Leu Ser			
610	615	620	
Ser Phe Ile Gly Ala Gly Ser Pro Ser Leu Val Lys Ala Cys Asp Ser			
625	630	635	640
Ser Pro Pro His Ala Thr Gln Arg Arg Ser Leu Pro Lys Val Glu Ala			
645	650	655	
Phe Ser Gln His His Ile Asp Glu Leu Pro Pro Pro Ser Gln Glu Leu			
660	665	670	
Leu Asp Asp Ile Glu Leu Leu Lys Gln Gln Gln Gly Ser Ser Thr Val			

675 680 685
 Leu His Glu Asn Thr Ala Ser Asp Gly Gly Gly Thr Ala Asn Asp Gln
 690 695 700
 Arg His Leu Glu Glu Gln Glu Thr Asp Ser Lys Lys Glu Asp Ser Ser
 705 710 715 720
 Met Leu Leu Ser Lys Glu Thr Glu Asp Leu Gly Glu Asp Thr Glu Arg
 725 730 735
 Ala His Ser Thr Leu Asp Glu Asp Leu Glu Arg Trp Leu Gln Pro Pro
 740 745 750
 Glu Glu Ser Val Glu Leu Gln Asp Leu Pro Lys Gly Ser Glu Arg Glu
 755 760 765
 Thr Asn Ile Lys Asp
 770

<210> 3788

<211> 969

<212> PRT

<213> Homo sapiens

<400> 3788

Met Val Lys Leu Val Leu Leu Ser Ile Val Leu Leu Lys Val Thr Val
 1 5 10 15
 Pro Lys Leu Ser Asn Tyr Leu Leu Gln Leu Asp Phe Met Pro Ile His
 20 25 30
 Arg Gly Ile Leu Ala Ile Ala Trp Ser Met Ala Asp Pro Glu Leu Leu
 35 40 45
 Leu Ser Cys Gly Lys Asp Ala Arg Ile Leu Cys Ser Asn Pro Asn Thr
 50 55 60
 Gly Glu Val Leu Tyr Glu Leu Pro Thr Asn Thr Gln Trp Cys Phe Asp
 65 70 75 80
 Ile Gln Trp Cys Pro Arg Asn Pro Ala Val Leu Ser Ala Ala Ser Phe
 85 90 95
 Asp Gly Arg Ile Ser Val Tyr Ser Ile Met Gly Gly Ser Thr Asp Gly
 100 105 110
 Leu Arg Gln Lys Gln Val Asp Lys Leu Ser Ser Ser Phe Gly Asn Leu

115	120	125		
Asp Pro Phe Gly Thr Gly Gln Pro Leu Pro Pro Leu Gln Ile Pro Gln				
130	135	140		
Gln Thr Ala Gln His Ser Ile Val Leu Pro Leu Lys Lys Pro Pro Lys				
145	150	155	160	
Trp Ile Arg Arg Pro Val Gly Ala Ser Phe Ser Phe Gly Gly Lys Leu				
165	170	175		
Val Thr Phe Glu Asn Val Arg Met Pro Ser His Gln Gly Ala Glu Gln				
180	185	190		
Gln Gln Gln Gln His His Val Phe Ile Ser Gln Val Val Thr Glu Lys				
195	200	205		
Glu Phe Leu Ser Arg Ser Asp Gln Leu Gln Gln Ala Val Gln Ser Gln				
210	215	220		
Gly Phe Ile Asn Tyr Cys Gln Lys Lys Ile Asp Ala Ser Gln Thr Glu				
225	230	235	240	
Phe Glu Lys Asn Val Trp Ser Phe Leu Lys Val Asn Phe Glu Asp Asp				
245	250	255		
Ser Arg Gly Lys Tyr Leu Glu Leu Leu Gly Tyr Arg Lys Glu Asp Leu				
260	265	270		
Gly Lys Lys His Ile Lys Glu Glu Lys Glu Glu Ser Glu Phe Leu Pro				
275	280	285		
Ser Ser Gly Gly Thr Phe Asn Ile Ser Val Ser Gly Asp Ile Asp Gly				
290	295	300		
Leu Ile Thr Gln Ala Leu Leu Thr Gly Asn Phe Glu Ser Ala Val Asp				
305	310	315	320	
Leu Cys Leu His Asp Asn Arg Met Ala Asp Ala Ile Ile Leu Ala Ile				
325	330	335		
Ala Gly Gly Gln Glu Leu Leu Ala Arg Thr Gln Lys Lys Tyr Phe Ala				
340	345	350		
Lys Ser Gln Ser Lys Ile Thr Arg Leu Ile Thr Ala Val Val Met Lys				
355	360	365		
Asn Trp Lys Glu Ile Val Glu Ser Cys Asp Leu Lys Asn Trp Arg Glu				
370	375	380		
Ala Leu Ala Ala Val Leu Thr Tyr Ala Lys Pro Asp Glu Phe Ser Ala				
385	390	395	400	
Leu Cys Asp Leu Leu Gly Thr Arg Leu Glu Asn Glu Gly Asp Ser Leu				

Leu Tyr Ala Ala Gln His Gln Ala Ser Ser Pro Thr Ser Ser Pro Ala
 690 695 700
 Thr Ser Phe Pro Pro Pro Pro Ser Ser Gly Ala Ser Phe Gln His Gly
 705 710 715 720
 Gly Pro Gly Ala Pro Pro Ser Ser Ser Ala Tyr Ala Leu Pro Pro Gly
 725 730 735
 Thr Thr Gly Pro Gln Asn Gly Trp Asn Asp Pro Pro Ala Leu Asn Arg
 740 745 750
 Val Pro Lys Lys Lys Lys Met Pro Glu Asn Phe Met Pro Pro Val Pro
 755 760 765
 Ile Thr Ser Pro Ile Met Asn Pro Leu Gly Asp Pro Gln Ser Gln Met
 770 775 780
 Leu Gln Gln Gln Pro Ser Ala Pro Val Pro Leu Ser Ser Gln Ser Ser
 785 790 795 800
 Phe Pro Gln Pro His Leu Pro Gly Gly Gln Pro Phe His Gly Val Gln
 805 810 815
 Gln Pro Leu Gly Gln Thr Gly Met Pro Pro Ser Phe Ser Lys Pro Asn
 820 825 830
 Ile Glu Gly Ala Pro Gly Ala Pro Ile Gly Asn Thr Phe Gln His Val
 835 840 845
 Gln Ser Leu Pro Thr Lys Lys Ile Thr Lys Lys Pro Ile Pro Asp Glu
 850 855 860
 His Leu Ile Leu Lys Thr Thr Phe Glu Asp Leu Ile Gln Arg Cys Leu
 865 870 875 880
 Ser Ser Ala Thr Asp Pro Gln Thr Lys Arg Lys Leu Asp Asp Ala Ser
 885 890 895
 Lys Arg Leu Glu Phe Leu Tyr Asp Lys Leu Arg Glu Gln Thr Leu Ser
 900 905 910
 Pro Thr Ile Thr Ser Gly Leu His Asn Ile Ala Arg Ser Ile Glu Thr
 915 920 925
 Arg Asn Tyr Ser Glu Gly Leu Thr Met His Thr His Ile Val Ser Thr
 930 935 940
 Ser Asn Phe Ser Glu Thr Ser Ala Phe Met Pro Val Leu Lys Val Val
 945 950 955 960
 Leu Thr Gln Ala Asn Lys Leu Gly Val
 965

<210> 3789

<211> 1488

<212> PRT

<213> Homo sapiens

<400> 3789

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Met Val Lys Gly Ser Val Glu Asn Tyr Arg Leu Ile His Asn Trp Val
  1             5             10             15
Met Ala Gln His Met Gln Ser His Ala Pro Tyr Lys Trp Asp Tyr Trp
             20             25             30
Pro His Glu Asp Val Arg Ala Glu Cys Arg Phe Val Gly Leu Thr Asn
             35             40             45
Leu Gly Ala Thr Cys Tyr Leu Ala Ser Thr Ile Gln Gln Leu Tyr Met
             50             55             60
Ile Pro Glu Ala Arg Gln Ala Val Phe Thr Ala Lys Tyr Ser Glu Asp

             65             70             75             80
Met Lys His Lys Thr Thr Leu Leu Glu Leu Gln Lys Met Phe Thr Tyr
             85             90             95
Leu Met Glu Ser Glu Cys Lys Ala Tyr Asn Pro Arg Pro Phe Cys Lys
             100            105            110
Thr Tyr Thr Met Asp Lys Gln Pro Leu Asn Thr Gly Glu Gln Lys Asp
             115            120            125
Met Thr Glu Phe Phe Thr Asp Leu Ile Thr Lys Ile Glu Glu Met Ser
             130            135            140
Pro Glu Leu Lys Asn Thr Val Lys Ser Leu Phe Gly Gly Val Ile Thr
145             150             155             160
Asn Asn Val Val Ser Leu Asp Cys Glu His Val Ser Gln Thr Ala Glu
             165             170             175
Glu Phe Tyr Thr Val Arg Cys Gln Val Ala Asp Met Lys Asn Ile Tyr
             180            185            190
Glu Ser Leu Asp Glu Val Thr Ile Lys Asp Thr Leu Glu Gly Asp Asn
             195            200            205
Met Tyr Thr Cys Ser His Cys Gly Lys Lys Val Arg Ala Glu Lys Arg

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210	215	220	
Ala Cys Phe Lys Lys Leu Pro Arg Ile Leu Ser Phe Asn Thr Met Arg			
225	230	235	240
Tyr Thr Phe Asn Met Val Thr Met Met Lys Glu Lys Val Asn Thr His			
	245	250	255
Phe Ser Phe Pro Leu Arg Leu Asp Met Thr Pro Tyr Thr Glu Asp Phe			
	260	265	270
Leu Met Gly Lys Ser Glu Arg Lys Glu Gly Phe Lys Glu Val Ser Asp			
	275	280	285
His Ser Lys Asp Ser Glu Ser Tyr Glu Tyr Asp Leu Ile Gly Val Thr			
290	295	300	
Val His Thr Gly Thr Ala Asp Gly Gly His Tyr Tyr Ser Phe Ile Arg			
305	310	315	320
Asp Ile Val Asn Pro His Ala Tyr Lys Asn Asn Lys Trp Tyr Leu Phe			
	325	330	335
Asn Asp Ala Glu Val Lys Pro Phe Asp Ser Ala Gln Leu Ala Ser Glu			
	340	345	350
Cys Phe Gly Gly Glu Met Thr Thr Lys Thr Tyr Asp Ser Val Thr Asp			
	355	360	365
Lys Phe Met Asp Phe Ser Phe Glu Lys Thr His Ser Ala Tyr Met Leu			
370	375	380	
Phe Tyr Lys Arg Met Glu Pro Glu Glu Glu Asn Gly Arg Glu Tyr Lys			
385	390	395	400
Phe Asp Val Ser Ser Glu Leu Leu Glu Trp Ile Trp His Asp Asn Met			
	405	410	415
Gln Phe Leu Gln Asp Lys Asn Ile Phe Glu His Thr Tyr Phe Gly Phe			
	420	425	430
Met Trp Gln Leu Cys Ser Cys Ile Pro Ser Thr Leu Pro Asp Pro Lys			
	435	440	445
Ala Val Ser Leu Met Thr Ala Lys Leu Ser Thr Ser Phe Val Leu Glu			
	450	455	460
Thr Phe Ile His Ser Lys Glu Lys Pro Thr Met Leu Gln Trp Ile Glu			
465	470	475	480
Leu Leu Thr Lys Gln Phe Asn Asn Ser Gln Ala Ala Cys Glu Trp Phe			
	485	490	495
Leu Asp Arg Met Ala Asp Asp Asp Trp Trp Pro Met Gln Ile Leu Ile			

500	505	510
Lys Cys Pro Asn Gln Ile Val	Arg Gln Met Phe Gln Arg	Leu Cys Ile
515	520	525
His Val Ile Gln Arg Leu Arg	Pro Val His Ala His	Leu Tyr Leu Gln
530	535	540
Pro Gly Met Glu Asp Gly Ser	Asp Asp Met Asp Thr Ser	Val Glu Asp
545	550	555
Ile Gly Gly Arg Ser Cys Val	Thr Arg Phe Val Arg Thr	Leu Leu Leu
565	570	575
Ile Met Glu His Gly Val Lys	Pro His Ser Lys His	Leu Thr Glu Tyr
580	585	590
Phe Ala Phe Leu Tyr Glu Phe	Ala Lys Met Gly Glu Glu	Glu Ser Gln
595	600	605
Phe Leu Leu Ser Leu Gln Ala	Ile Ser Thr Met Val His	Phe Tyr Met
610	615	620
Gly Thr Lys Gly Pro Glu Asn	Pro Gln Val Glu Val Leu	Ser Glu Glu
625	630	635
Glu Gly Glu Glu Glu Glu Glu	Glu Asp Ile Leu Ser Leu	Ala Glu
645	650	655
Glu Lys Tyr Arg Pro Ala Ala	Leu Glu Lys Met Ile Ala	Leu Val Ala
660	665	670
Leu Leu Val Glu Gln Ser Arg	Ser Glu Arg His Leu Thr	Leu Ser Gln
675	680	685
Thr Asp Met Ala Ala Leu Thr	Gly Gly Lys Gly Phe Pro	Phe Leu Phe
690	695	700
Gln His Ile Arg Asp Gly Ile	Asn Ile Arg Gln Thr Cys	Asn Leu Ile
705	710	715
Phe Ser Leu Cys Arg Tyr Asn	Asn Arg Leu Ala Glu His	Ile Val Ser
725	730	735
Met Leu Phe Thr Ser Ile Ala	Lys Leu Thr Pro Glu Ala	Ala Asn Pro
740	745	750
Phe Phe Lys Leu Leu Thr Met	Leu Met Glu Phe Ala Gly	Gly Pro Pro
755	760	765
Gly Met Pro Pro Phe Ala Ser	Tyr Ile Leu Gln Arg Ile	Trp Glu Val
770	775	780
Ile Glu Tyr Asn Pro Ser Gln	Cys Leu Asp Trp Leu Ala	Val Gln Thr

785	790	795	800
Pro Arg Asn Lys Leu	Ala His Ser Trp Val	Leu Gln Asn Met Glu	Asn
805	810	815	
Trp Val Glu Arg Phe	Leu Leu Ala His Asn Tyr	Pro Arg Val Arg Thr	
820	825	830	
Ser Ala Ala Tyr Leu	Leu Val Ser Leu Ile	Pro Ser Asn Ser Phe	Arg
835	840	845	
Gln Met Phe Arg Ser	Thr Arg Ser Leu His Ile	Pro Thr Arg Asp Leu	
850	855	860	
Pro Leu Ser Pro Asp	Thr Thr Val Val Leu	His Gln Val Tyr Asn	Val
865	870	875	880
Leu Leu Gly Leu Leu	Ser Arg Ala Lys Leu	Tyr Val Asp Ala Ala	Val
885	890	895	
His Gly Thr Thr Lys	Leu Val Pro Tyr Phe	Ser Phe Met Thr Tyr	Cys
900	905	910	
Leu Ile Ser Lys Thr	Glu Lys Leu Met Phe	Ser Thr Tyr Phe Met	Asp
915	920	925	
Leu Trp Asn Leu Phe	Gln Pro Lys Leu Ser	Glu Pro Ala Ile Ala	Thr
930	935	940	
Asn His Asn Lys Gln	Ala Leu Leu Ser Phe	Trp Tyr Asn Val Cys	Ala
945	950	955	960
Asp Cys Pro Glu Asn	Ile Arg Leu Ile Val	Gln Asn Pro Val Val	Thr
965	970	975	
Lys Asn Ile Ala Phe	Asn Tyr Ile Leu Ala	Asp His Asp Asp Gln	Asp
980	985	990	
Val Val Leu Phe Asn	Arg Gly Met Leu Pro	Ala Tyr Tyr Gly Ile	Leu
995	1000	1005	
Arg Leu Cys Cys Glu	Gln Ser Pro Ala Phe	Thr Arg Gln Leu Ala	Ser
1010	1015	1020	
His Gln Asn Ile Gln	Trp Ala Phe Lys Asn	Leu Thr Pro His Ala	Ser
1025	1030	1035	1040
Gln Tyr Pro Gly Ala	Val Glu Glu Leu Phe	Asn Leu Met Gln Leu	Phe
1045	1050	1055	
Ile Ala Gln Arg Pro	Asp Met Arg Glu Glu	Glu Leu Glu Asp Ile	Lys
1060	1065	1070	
Gln Phe Lys Lys Thr	Thr Ile Ser Cys Tyr	Leu Arg Cys Leu Asp	Gly

1075	1080	1085
Arg Ser Cys Trp Thr Thr Leu Ile Ser Ala Phe Arg Ile Leu Leu Glu		
1090	1095	1100
Ser Asp Glu Asp Arg Leu Leu Val Val Phe Asn Arg Gly Leu Ile Leu		
1105	1110	1115
Met Thr Glu Ser Phe Asn Thr Leu His Met Met Tyr His Glu Ala Thr		
1125	1130	1135
Ala Cys His Val Thr Gly Asp Leu Val Glu Leu Leu Ser Ile Phe Leu		
1140	1145	1150
Ser Val Leu Lys Ser Thr Arg Pro Tyr Leu Gln Arg Lys Asp Val Lys		
1155	1160	1165
Gln Ala Leu Ile Gln Trp Gln Glu Arg Ile Glu Phe Ala His Lys Leu		
1170	1175	1180
Leu Thr Leu Leu Asn Ser Tyr Ser Pro Pro Glu Leu Arg Asn Ala Cys		
1185	1190	1195
Ile Asp Val Leu Lys Glu Leu Val Leu Leu Ser Pro His Asp Phe Leu		
1205	1210	1215
His Thr Leu Val Pro Phe Leu Gln His Asn His Cys Thr Tyr His His		
1220	1225	1230
Ser Asn Ile Pro Met Ser Leu Gly Pro Tyr Phe Pro Cys Arg Glu Asn		
1235	1240	1245
Ile Lys Leu Ile Gly Gly Lys Ser Asn Ile Arg Pro Pro Arg Pro Glu		
1250	1255	1260
Leu Asn Met Cys Leu Leu Pro Thr Met Val Glu Thr Ser Lys Gly Lys		
1265	1270	1275
Asp Asp Val Tyr Asp Arg Met Leu Leu Asp Tyr Phe Phe Ser Tyr His		
1285	1290	1295
Gln Phe Ile His Leu Leu Cys Arg Val Ala Ile Asn Cys Glu Lys Phe		
1300	1305	1310
Thr Glu Thr Leu Val Lys Leu Ser Val Leu Val Ala Tyr Glu Gly Leu		
1315	1320	1325
Pro Leu His Leu Ala Leu Phe Pro Lys Leu Trp Thr Glu Leu Cys Gln		
1330	1335	1340
Thr Gln Ser Ala Met Ser Lys Asn Cys Ile Lys Leu Leu Cys Glu Asp		
1345	1350	1355
Pro Val Phe Ala Glu Tyr Ile Lys Cys Ile Leu Met Asp Glu Arg Thr		

1365	1370	1375
Phe Leu Asn Asn Asn Ile Val Tyr Thr Phe Met Thr His Phe Leu Leu		
1380	1385	1390
Lys Val Gln Ser Gln Val Phe Ser Glu Ala Asn Cys Ala Asn Leu Ile		
1395	1400	1405
Ser Thr Leu Ile Thr Asn Leu Ile Ser Gln Tyr Gln Asn Leu Gln Ser		
1410	1415	1420
Asp Phe Ser Asn Arg Val Glu Ile Ser Lys Ala Ser Ala Ser Leu Asn		
1425	1430	1435
Gly Asp Leu Arg Ala Leu Ala Leu Leu Ser Val His Thr Pro Lys		
1445	1450	1455
Gln Leu Asn Pro Ala Leu Ile Pro Thr Leu Gln Glu Leu Leu Ser Lys		
1460	1465	1470
Cys Arg Thr Cys Leu Gln Gln Arg Asn Ser Leu Gln Glu Gln Glu Ala		
1475	1480	1485

<210> 3790

<211> 190

<212> PRT

<213> Homo sapiens

<400> 3790

Met Asn Glu Phe Phe Ser Val Asp Asp Asn Asn Glu Glu Glu Glu Asp		
1	5	10
Val Glu Met Lys Glu Asp Ser Asp Glu Asn Gly Pro Glu Glu Lys Gln		
20	25	30
Ser Val Glu Glu Met Glu Glu Gln Ser Gln Asp Ala Asp Gly Val Asn		
35	40	45
Thr Val Thr Val Pro Gly Pro Ala Ser Glu Glu Ala Val Glu Asp Cys		
50	55	60
Lys Asp Glu Asp Phe Ala Lys Asp Glu Asn Ile Thr Lys Gly Gly Glu		
65	70	75
Val Thr Asp His Ser Val Arg Asp Gln Asp His Pro Asp Gly Gln Glu		
85	90	95

Asn Asp Ser Thr Lys Asn Glu Ile Lys Ile Glu Thr Glu Ser Gln Ser
 100 105 110
 Ser Tyr Met Glu Thr Glu Glu Leu Ser Ser Asn Gln Glu Asp Ala Val
 115 120 125
 Ile Val Glu Gln Pro Glu Val Ile Pro Leu Thr Glu Asp Gln Glu Glu
 130 135 140
 Lys Glu Gly Glu Lys Ala Pro Gly Glu Asp Thr Pro Arg Met Pro Gly
 145 150 155 160
 Lys Ser Glu Gly Ser Ser Asp Leu Glu Asn Thr Pro Gly Pro Asp Ala
 165 170 175
 Gly Ala Gln Asp Glu Ala Lys Glu Gln Arg Asn Gly Thr Lys
 180 185 190

<210> 3791

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3791

Met Gly Phe Leu Pro Asp Tyr Phe Leu Val Phe Ser Leu Thr Glu Cys
 1 5 10 15
 His Lys Gly Leu Gly Leu Trp Phe Pro Thr Gly Lys Glu Thr Ser Asn
 20 25 30
 Phe Ala Ser Leu Ser Ser Phe Tyr Met Thr Met Gly Gly Ser Cys Ser
 35 40 45
 Tyr Gly Ser Ile Ser Phe Pro Pro Lys Ala Tyr Glu Thr Gly Cys Asn
 50 55 60
 Leu Asn Pro Tyr Phe Ile Lys Gly Glu Glu Met Ser Lys Ser Pro Glu
 65 70 75 80
 Ile Val Gly Lys Ser Ile Ile Arg Thr Arg Asn Gly Val Phe Leu Leu
 85 90 95
 Leu Ile Ser Arg Gly Glu Gly
 100

<210> 3792

<211> 564

<212> PRT

<213> Homo sapiens

<400> 3792

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Met Pro Asn Arg Thr Arg Arg Pro Gly Thr Gln Met Val Arg Thr Phe
  1                      5                      10                      15
Cys Pro Pro Pro Leu Pro Lys Pro Ser Ser Thr Thr Pro Thr Pro Leu
          20                      25                      30
Val Ser Glu Thr Gly Gly Asn Ser Pro Ser Asp Lys Val Asp Asn Glu
          35                      40                      45
Leu Lys Asn Leu Glu His Leu Ser Ser Phe Ser Ser Asp Glu Asp Asp
          50                      55                      60
Pro Gly Tyr Ser Gln Asp Ala Tyr Lys Ser Val Ser Thr Pro Leu Thr
          65                      70                      75                      80
Thr Leu Asp Ala Thr Ser Asp Lys Lys Lys Lys Thr Glu Ala Leu Gln
          85                      90                      95
Val Ala Thr Thr Ser Pro Thr Ala Asn Thr Thr Gly Thr Ala Thr Thr
          100                     105                     110
Ser Ser Thr Thr Val Gly Ala Val Lys Gln Glu Pro Leu His Ser Thr
          115                     120                     125
Ser Tyr Ala Val Asn Ile Leu Glu Asn Ile Ser Ser Ser Glu Ser Ser
          130                     135                     140
Lys Pro Ile Glu Leu Asp Gly Leu Pro Ser Asp Gln Phe Ala Lys Gly
          145                     150                     155                     160
Gln Asp Thr Val Ala Ile Glu Gly Phe Thr Asp Glu Glu Asp Thr Glu
          165                     170                     175
Ser Gly Gly Glu Gly Gln Tyr Arg Glu Arg Asp Glu Phe Val Val Lys
          180                     185                     190
Ile Glu Asp Ile Glu Thr Phe Lys Glu Ala Leu Lys Thr Gly Lys Glu
          195                     200                     205
Pro Pro Ala Ile Trp Lys Val Gln Lys Ala Leu Leu Gln Lys Phe Val
          210                     215                     220
Pro Glu Ile Arg Asp Gly Gln Arg Glu Phe Ala Ala Thr Asn Ser Tyr
          225                     230                     235                     240

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Leu Gly Gln Glu Glu Ile Val Gln Leu Cys Met Lys Asn Val Lys Trp
 530 535 540
 Val Glu Asp Leu Phe Glu Lys Phe Gly Glu Leu Leu Asn His Val Gln
 545 550 555 560
 Gln Lys Cys Ser

<210> 3793

<211> 127

<212> PRT

<213> Homo sapiens

<400> 3793

Met Arg Glu Leu Arg His Arg Ala Arg Pro Ser Gly Phe Asn Arg Trp
 1 5 10 15
 Met Gly Ala Ala Ser Gln Ser Pro Leu Ser Ser Ala Ser Pro Ser Pro
 20 25 30
 Gly His Thr Pro Ala Pro Thr Thr Ser Pro Thr Gly Tyr Arg Ala Glu
 35 40 45
 Asp Pro Pro Ala Gly Arg Ala Ala Gln Arg Pro Gln His Thr His Pro
 50 55 60
 Thr Leu Gln Gly Leu Thr Leu Pro Ala Gln Leu Asn Ala Thr Ser Ser
 65 70 75 80
 Leu Lys Leu Ser Pro Ser Pro Pro Pro Thr Arg Ala Ala Ser Gly Pro
 85 90 95
 Arg Thr Val Pro Gly Gly Ala Pro Arg Gln Asp Gln Thr Tyr Pro Ser
 100 105 110
 Ser Lys Ser Pro Ser Leu Leu Thr Ala Gln Met Leu Pro Gly His
 115 120 125

<210> 3794

<211> 711

<212> PRT

<213> Homo sapiens

<400> 3794

Met Ser Ser Val Gln Ser Gln Gln Glu Gln Leu Ser Gln Ser Asp Pro
 1 5 10 15
 Ser Pro Ser Pro Asn Ser Cys Ser Ser Phe Glu Leu Ile Asp Met Asp
 20 25 30
 Ala Gly Ser Leu Tyr Glu Pro Val Ser Pro His Trp Phe Tyr Cys Lys
 35 40 45
 Ile Ile Asp Ser Lys Glu Thr Trp Ile Pro Phe Asn Ser Glu Asp Ser
 50 55 60
 Gln Gln Leu Glu Glu Ala Tyr Ser Ser Gly Lys Gly Cys Asn Gly Arg
 65 70 75 80
 Val Val Pro Thr Asp Gly Gly Arg Tyr Asp Val His Leu Gly Glu Arg
 85 90 95
 Met Arg Tyr Ala Val Tyr Trp Asp Glu Leu Ala Ser Glu Val Arg Arg
 100 105 110
 Cys Thr Trp Phe Tyr Lys Gly Asp Lys Asp Asn Lys Tyr Val Pro Tyr
 115 120 125
 Ser Glu Ser Phe Ser Gln Val Leu Glu Glu Thr Tyr Met Leu Ala Val
 130 135 140
 Thr Leu Asp Glu Trp Lys Lys Lys Leu Glu Ser Pro Asn Arg Glu Ile
 145 150 155 160
 Ile Ile Leu His Asn Pro Lys Leu Met Val His Tyr Gln Pro Val Ala
 165 170 175
 Gly Ser Asp Asp Trp Gly Ser Thr Pro Thr Glu Gln Gly Arg Pro Arg
 180 185 190
 Thr Val Lys Arg Gly Val Glu Asn Ile Ser Val Asp Ile His Cys Gly
 195 200 205
 Glu Pro Leu Gln Ile Asp His Leu Val Phe Val Val His Gly Ile Gly
 210 215 220
 Pro Ala Cys Asp Leu Arg Phe Arg Ser Ile Val Gln Cys Val Asn Asp
 225 230 235 240
 Phe Arg Ser Val Ser Leu Asn Leu Leu Gln Thr His Phe Lys Lys Ala
 245 250 255
 Gln Glu Asn Gln Gln Ile Gly Arg Val Glu Phe Leu Pro Val Asn Trp
 260 265 270

His Ser Pro Leu His Ser Thr Gly Val Asp Val Asp Leu Gln Arg Ile
 275 280 285
 Thr Leu Pro Ser Ile Asn Arg Leu Arg His Phe Thr Asn Asp Thr Ile
 290 295 300
 Leu Asp Val Phe Phe Tyr Asn Ser Pro Thr Tyr Cys Gln Thr Ile Val
 305 310 315 320
 Asp Thr Val Ala Ser Glu Met Asn Arg Ile Tyr Thr Leu Phe Leu Gln
 325 330 335
 Arg Asn Pro Asp Phe Lys Gly Gly Val Ser Ile Ala Gly His Ser Leu
 340 345 350
 Gly Ser Leu Ile Leu Phe Asp Ile Leu Thr Asn Gln Lys Asp Ser Leu
 355 360 365
 Gly Asp Ile Asp Ser Glu Lys Asp Ser Leu Asn Ile Val Met Asp Gln
 370 375 380
 Gly Asp Thr Pro Thr Leu Glu Glu Asp Leu Lys Lys Leu Gln Leu Ser
 385 390 395 400
 Glu Phe Phe Asp Ile Phe Glu Lys Glu Lys Val Asp Lys Glu Ala Leu
 405 410 415
 Ala Leu Cys Thr Asp Arg Asp Leu Gln Glu Ile Gly Ile Pro Leu Gly
 420 425 430
 Pro Arg Lys Lys Ile Leu Asn Tyr Phe Ser Thr Arg Lys Asn Ser Met
 435 440 445
 Gly Ile Lys Arg Pro Ala Pro Gln Pro Ala Ser Gly Ala Asn Ile Pro
 450 455 460
 Lys Glu Ser Glu Phe Cys Ser Ser Ser Asn Thr Arg Asn Gly Asp Tyr
 465 470 475 480
 Leu Asp Val Gly Ile Gly Gln Val Ser Val Lys Tyr Pro Arg Leu Ile
 485 490 495
 Tyr Lys Pro Glu Ile Phe Phe Ala Phe Gly Ser Pro Ile Gly Met Phe
 500 505 510
 Leu Thr Val Arg Gly Leu Lys Arg Ile Asp Pro Asn Tyr Arg Phe Pro
 515 520 525
 Thr Cys Lys Gly Phe Phe Asn Ile Tyr His Pro Phe Asp Pro Val Ala
 530 535 540
 Tyr Arg Ile Glu Pro Met Val Val Pro Gly Val Glu Phe Glu Pro Met

545 550 555 560
 Leu Ile Pro His His Lys Gly Arg Lys Arg Met His Leu Glu Leu Arg
 565 570 575
 Glu Gly Leu Thr Arg Met Ser Met Asp Leu Lys Asn Asn Leu Leu Gly
 580 585 590
 Ser Leu Arg Met Ala Trp Lys Ser Phe Thr Arg Ala Pro Tyr Pro Ala
 595 600 605
 Leu Gln Ala Ser Glu Thr Pro Glu Glu Thr Glu Ala Glu Pro Glu Ser
 610 615 620
 Thr Ser Glu Lys Pro Ser Asp Val Asn Thr Glu Glu Thr Ser Val Ala
 625 630 635 640
 Val Lys Glu Glu Val Leu Pro Ile Asn Val Gly Met Leu Asn Gly Gly
 645 650 655
 Gln Arg Ile Asp Tyr Val Leu Gln Glu Lys Pro Ile Glu Ser Phe Asn
 660 665 670
 Glu Tyr Leu Phe Ala Leu Gln Ser His Leu Cys Tyr Trp Glu Ser Glu
 675 680 685
 Asp Thr Val Leu Leu Val Leu Lys Glu Ile Tyr Gln Thr Gln Gly Ile
 690 695 700
 Phe Leu Asp Gln Pro Leu Gln
 705 710

<210> 3795

<211> 152

<212> PRT

<213> Homo sapiens

<400> 3795

Met Ser Arg Val Met Pro Ala Trp Phe Leu Phe His Ala Trp Arg Ile
 1 5 10 15
 Cys Ile Gly Glu Leu Arg Thr Ala Ala Lys Val Ser Gly Gln Gly Trp
 20 25 30
 Trp Ala Gln Trp Ala Ala Cys Gly Arg Cys Leu Ala Met Val Arg Arg
 35 40 45
 Cys Glu Ser Pro Pro Gly Ser Arg Ala Val Gly Gly Gln Leu Arg His

50	55	60
Gly Ser His Pro Gln Pro Ser Glu Trp Leu Pro Cys Ser Thr Gln Gly		
65	70	75
Gly Lys Arg Glu Arg Pro Met Pro Ala Val Ser Ser Val Leu Cys Leu		
85	90	95
His Cys Cys Phe Pro Ser Phe Leu Cys Arg Ser Trp Ser Ser Gln Arg		
100	105	110
Gln His Lys Ala Gly Glu Arg Gly Gly Gly Gly Lys Met Glu Glu		
115	120	125
Pro Thr Leu Leu Pro Pro Arg Leu Arg Glu Arg Asn Ile Ser Leu Asp		
130	135	140
Trp Lys Val Pro Ile Arg Gln Tyr		
145	150	

<210> 3796

<211> 890

<212> PRT

<213> Homo sapiens

<400> 3796

Met Asp Phe Gly Thr Val Arg Glu Thr Leu Asp Ala Gly Asn Tyr Asp		
1	5	10
Ser Pro Leu Glu Phe Cys Lys Asp Ile Arg Leu Ile Phe Ser Asn Ala		
20	25	30
Lys Ala Tyr Thr Pro Asn Lys Arg Ser Lys Ile Tyr Ser Met Thr Leu		
35	40	45
Arg Leu Ser Ala Leu Phe Glu Glu Lys Met Lys Lys Ile Ser Ser Asp		
50	55	60
Phe Lys Ile Gly Gln Lys Phe Asn Glu Lys Leu Arg Arg Ser Gln Arg		
65	70	75
Phe Lys Gln Arg Gln Asn Cys Lys Gly Asp Ser Gln Pro Asn Lys Ser		
85	90	95
Ile Arg Asn Leu Lys Pro Lys Arg Leu Lys Ser Gln Thr Lys Ile Ile		
100	105	110
Pro Glu Leu Val Gly Ser Pro Thr Gln Ser Thr Ser Ser Arg Thr Ala		

115	120	125
Tyr Leu Gly Thr His Lys Thr Ser Ala Gly Ile Ser Ser Gly Val Thr		
130	135	140
Ser Gly Asp Ser Ser Asp Ser Ala Glu Ser Ser Glu Arg Arg Lys Arg		
145	150	155
Asn Arg Pro Ile Thr Asn Gly Ser Thr Leu Ser Glu Ser Glu Val Glu		
165	170	175
Asp Ser Leu Ala Thr Ser Leu Ser Ser Ser Ala Ser Ser Ser Ser Glu		
180	185	190
Glu Ser Lys Glu Ser Ser Arg Ala Arg Glu Ser Ser Ser Arg Ser Gly		
195	200	205
Leu Ser Arg Ser Ser Asn Leu Arg Val Thr Arg Thr Arg Ala Ala Gln		
210	215	220
Arg Lys Thr Gly Pro Val Ser Leu Ala Asn Gly Cys Gly Arg Lys Ala		
225	230	235
Thr Arg Lys Arg Val Tyr Leu Ser Asp Ser Asp Asn Asn Ser Leu Glu		
245	250	255
Thr Gly Glu Ile Leu Lys Ala Arg Ala Gly Asn Asn Arg Lys Val Leu		
260	265	270
Arg Lys Cys Ala Ala Val Ala Ala Asn Lys Ile Lys Leu Met Ser Asp		
275	280	285
Val Glu Glu Asn Ser Ser Ser Glu Ser Val Cys Ser Gly Arg Lys Leu		
290	295	300
Pro His Arg Asn Ala Ser Ala Val Ala Arg Lys Lys Leu Leu His Asn		
305	310	315
Ser Glu Asp Glu Gln Ser Leu Lys Ser Glu Ile Glu Glu Glu Glu Leu		
325	330	335
Lys Asp Glu Asn Gln Leu Leu Pro Val Ser Ser Ser His Thr Ala Gln		
340	345	350
Ser Asn Val Asp Glu Ser Glu Asn Arg Asp Ser Glu Ser Glu Ser Asp		
355	360	365
Leu Arg Val Ala Arg Lys Asn Trp His Ala Asn Gly Tyr Lys Ser His		
370	375	380
Thr Pro Ala Pro Ser Lys Thr Lys Phe Leu Lys Ile Glu Ser Ser Glu		
385	390	395
Glu Asp Ser Lys Ser His Asp Ser Asp His Ala Cys Asn Arg Thr Ala		

	405		410		415										
Gly	Pro	Ser	Thr	Ser	Val	Gln	Lys	Leu	Lys	Ala	Glu	Ser	Ile	Ser	Glu
	420							425						430	
Glu	Ala	Asp	Ser	Glu	Pro	Gly	Arg	Ser	Gly	Gly	Arg	Lys	Tyr	Asn	Thr
	435							440						445	
Phe	His	Lys	Asn	Ala	Ser	Phe	Phe	Lys	Lys	Thr	Lys	Ile	Leu	Ser	Asp
	450							455						460	
Ser	Glu	Asp	Ser	Glu	Ser	Glu	Glu	Gln	Asp	Arg	Glu	Asp	Gly	Lys	Cys
465								470						475	480
His	Lys	Met	Glu	Met	Asn	Pro	Ile	Ser	Gly	Asn	Leu	Asn	Cys	Asp	Pro
			485						490					495	
Ile	Ala	Met	Ser	Gln	Cys	Ser	Ser	Asp	His	Gly	Cys	Glu	Thr	Asp	Leu
	500								505					510	
Asp	Ser	Asp	Asp	Asp	Lys	Ile	Glu	Lys	Pro	Asn	Asn	Phe	Met	Lys	Asp
	515								520					525	
Ser	Ala	Ser	Gln	Asp	Asn	Gly	Leu	Ser	Arg	Lys	Ile	Ser	Arg	Lys	Arg
	530								535					540	
Val	Cys	Ser	Ser	Asp	Ser	Asp	Ser	Ser	Leu	Gln	Val	Val	Lys	Lys	Ser
545									550					555	560
Ser	Lys	Ala	Arg	Thr	Gly	Leu	Leu	Arg	Ile	Thr	Arg	Arg	Cys	Ala	Ala
			565						570					575	
Thr	Ala	Ala	Asn	Lys	Ile	Lys	Leu	Met	Ser	Asp	Val	Glu	Asp	Val	Ser
	580								585					590	
Leu	Glu	Asn	Val	His	Thr	Arg	Ser	Lys	Asn	Gly	Arg	Lys	Lys	Pro	Leu
	595								600					605	
His	Leu	Ala	Cys	Thr	Thr	Ala	Lys	Lys	Lys	Leu	Ser	Asp	Cys	Glu	Gly
	610								615					620	
Ser	Val	His	Cys	Glu	Val	Pro	Ser	Glu	Gln	Tyr	Ala	Cys	Glu	Gly	Lys
625									630					635	640
Pro	Pro	Asp	Pro	Asp	Ser	Glu	Gly	Ser	Thr	Lys	Val	Leu	Ser	Gln	Ala
			645						650					655	
Leu	Asn	Gly	Asp	Ser	Asp	Ser	Glu	Asp	Met	Leu	Asn	Ser	Glu	His	Lys
	660								665					670	
His	Arg	His	Thr	Asn	Ile	His	Lys	Ile	Asp	Ala	Pro	Ser	Lys	Arg	Lys
	675								680					685	
Ser	Ser	Ser	Val	Thr	Ser	Ser	Gly	Glu	Asp	Ser	Lys	Ser	His	Ile	Pro

690	695	700	
Gly Ser Glu Thr Asp Arg Thr Phe Ser Ser Glu Ser Thr Leu Ala Gln			
705	710	715	720
Lys Ala Thr Ala Glu Asn Asn Phe Glu Val Glu Leu Asn Tyr Gly Leu			
	725	730	735
Arg Arg Trp Asn Gly Arg Arg Leu Arg Thr Tyr Gly Lys Ala Pro Phe			
	740	745	750
Ser Lys Thr Lys Val Ile His Asp Ser Gln Glu Thr Ala Glu Lys Glu			
	755	760	765
Val Lys Arg Lys Arg Ser His Pro Glu Leu Glu Asn Val Lys Ile Ser			
	770	775	780
Glu Thr Thr Gly Asn Ser Lys Phe Arg Pro Asp Thr Ser Ser Lys Ser			
785	790	795	800
Ser Asp Leu Gly Ser Val Thr Glu Ser Asp Ile Asp Cys Thr Asp Asn			
	805	810	815
Thr Lys Thr Lys Arg Arg Lys Thr Lys Gly Lys Ala Lys Val Val Arg			
	820	825	830
Lys Glu Phe Val Pro Arg Asp Arg Glu Pro Asn Thr Lys Val Arg Thr			
	835	840	845
Cys Met His Asn Gln Lys Asp Ala Val Gln Met Pro Ser Glu Thr Leu			
	850	855	860
Lys Ala Lys Met Val Pro Glu Lys Val Pro Arg Arg Cys Ala Thr Val			
865	870	875	880
Ala Ala Asn Lys Ile Lys Ile Met Ser Asn			
	885	890	

<210> 3797

<211> 874

<212> PRT

<213> Homo sapiens

<400> 3797

Met Pro Gln Met Lys Ser Asp Lys Arg Glu Trp Ala Phe Val Lys Thr			
1	5	10	15
Ala Arg His Asn Trp Tyr Ser Arg Arg Phe Phe Phe Leu Ser Asn Asp			

20	25	30
Glu Leu Leu Glu Ile Leu Ser Glu Thr Lys Asp Pro Leu Arg Val Gln		
35	40	45
Pro His Leu Lys Lys Cys Phe Glu Gly Ile Ala Lys Leu Glu Phe Thr		
50	55	60
Asp Asn Leu Gly Ile Val Gly Met Ile Ser Ser Glu Lys Glu Thr Val		
65	70	75
Pro Phe Ile Gln Lys Ile Tyr Pro Ala Asn Ala Lys Gly Met Val Glu		
85	90	95
Lys Trp Leu Gln Gln Val Glu Gln Met Met Leu Ala Ser Met Arg Glu		
100	105	110
Val Ile Gly Leu Gly Ile Glu Ala Tyr Val Lys Val Pro Arg Asn His		
115	120	125
Trp Val Leu Gln Trp Pro Gly Gln Val Val Ile Cys Val Ser Ser Ile		
130	135	140
Phe Trp Thr Gln Glu Val Ser Gln Ala Leu Ala Glu Asn Thr Leu Leu		
145	150	155
Asp Phe Leu Lys Lys Ser Asn Asp Gln Ile Ala Gln Ile Val Gln Leu		
165	170	175
Val Arg Gly Lys Leu Ser Ser Gly Ala Arg Leu Thr Leu Gly Ala Leu		
180	185	190
Thr Val Ile Asp Val His Ala Arg Asp Val Val Ala Lys Leu Ser Glu		
195	200	205
Asp Arg Val Ser Asp Leu Asn Asp Phe Gln Trp Ile Ser Gln Leu Arg		
210	215	220
Tyr Tyr Trp Val Ala Lys Asp Val Gln Val Gln Ile Ile Thr Thr Glu		
225	230	235
Ala Leu Tyr Gly Tyr Glu Tyr Leu Gly Asn Ser Pro Arg Leu Val Ile		
245	250	255
Thr Pro Leu Thr Asp Arg Cys Tyr Arg Thr Leu Met Gly Ala Leu Lys		
260	265	270
Leu Asn Leu Gly Gly Ala Pro Glu Gly Pro Ala Gly Thr Gly Lys Thr		
275	280	285
Glu Thr Thr Lys Asp Leu Ala Lys Ala Leu Ala Lys Gln Cys Val Val		
290	295	300
Phe Asn Cys Ser Asp Gly Leu Asp Tyr Lys Ala Met Gly Lys Phe Phe		

305 310 315 320
 Lys Gly Leu Ala Gln Ala Gly Ala Trp Ala Cys Phe Asp Glu Phe Asn
 325 330 335
 Arg Ile Glu Val Glu Val Leu Ser Val Val Ala Gln Gln Ile Leu Ser

 340 345 350
 Ile Gln Gln Ala Ile Ile Arg Lys Leu Lys Thr Phe Ile Phe Glu Gly
 355 360 365
 Thr Glu Leu Ser Leu Asn Pro Thr Cys Ala Val Phe Ile Thr Met Asn
 370 375 380
 Pro Gly Tyr Ala Gly Arg Ala Glu Leu Pro Asp Asn Leu Lys Ala Leu
 385 390 395 400
 Phe Arg Thr Val Ala Met Met Val Pro Asp Tyr Ala Leu Ile Gly Glu
 405 410 415
 Met Ser Leu Tyr Ser Thr Gly Phe Leu Asp Ser Arg Ser Leu Ala Gln
 420 425 430
 Lys Ile Val Ala Thr Tyr Arg Leu Cys Ser Glu Gln Leu Ser Ser Gln
 435 440 445
 His His Tyr Asp Tyr Gly Met Arg Ala Val Asn Ser Val Leu Thr Ala
 450 455 460
 Ala Gly Asn Leu Lys Leu Lys Tyr Pro Glu Glu Asn Glu Ser Val Leu
 465 470 475 480
 Leu Leu Arg Ala Leu Leu Asp Val Asn Leu Ala Lys Phe Leu Ala Gln
 485 490 495
 Asp Val Pro Leu Phe Gln Gly Ile Ile Ser Asp Leu Phe Pro Gly Val
 500 505 510
 Val Leu Pro Lys Pro Asp Tyr Glu Val Phe Leu Lys Val Leu Asn Asp
 515 520 525
 Asn Ile Lys Lys Met Lys Leu Gln Pro Val Pro Trp Phe Ile Gly Lys
 530 535 540
 Ile Ile Gln Ile Tyr Glu Met Met Leu Val Arg His Gly Tyr Met Ile
 545 550 555 560
 Val Gly Asp Pro Met Gly Gly Lys Thr Ser Ala Tyr Lys Val Leu Ala
 565 570 575
 Ala Ala Leu Gly Asp Leu His Ala Ala Asn Gln Met Glu Glu Phe Ala
 580 585 590

Val Glu Tyr Lys Ile Ile Asn Pro Lys Ala Ile Thr Met Gly Gln Leu
 595 600 605
 Tyr Gly Cys Phe Asp Gln Val Ser His Glu Trp Met Asp Gly Val Leu
 610 615 620
 Ala Asn Ala Phe Arg Glu Gln Ala Ser Ser Leu Ser Asp Asp Arg Lys
 625 630 635 640
 Trp Ile Ile Phe Asp Gly Pro Val Asp Ala Ile Trp Ile Glu Asn Met
 645 650 655
 Asn Thr Val Leu Asp Asp Asn Lys Lys Leu Cys Leu Met Ser Gly Glu
 660 665 670
 Ile Ile Gln Met Asn Ser Lys Met Ser Leu Ile Phe Glu Pro Ala Asp
 675 680 685
 Leu Glu Gln Ala Ser Pro Ala Thr Val Ser Arg Cys Gly Met Ile Tyr
 690 695 700
 Met Glu Pro His Gln Leu Gly Trp Lys Pro Leu Lys Asp Ser Tyr Met
 705 710 715 720
 Asp Thr Leu Pro Ser Ser Leu Thr Lys Glu His Lys Glu Leu Val Asn
 725 730 735
 Asp Met Phe Met Trp Leu Val Gln Pro Cys Leu Glu Phe Gly Arg Leu
 740 745 750
 His Cys Lys Phe Val Val Gln Thr Ser Pro Ile His Leu Ala Phe Ser
 755 760 765
 Met Met Arg Leu Tyr Ser Ser Leu Leu Asp Glu Ile Arg Ala Val Glu
 770 775 780
 Glu Glu Glu Met Glu Leu Gly Glu Gly Leu Ser Ser Gln Gln Ile Phe
 785 790 795 800
 Leu Trp Leu Gln Gly Leu Phe Leu Phe Ser Leu Val Trp Thr Val Ala
 805 810 815
 Gly Thr Ile Asn Ala Asp Ser Arg Lys Lys Phe Asp Val Phe Phe Arg
 820 825 830
 Asn Leu Ile Met Gly Met Asp Asp Asn His Pro Arg Pro Lys Ser Val
 835 840 845
 Lys Leu Thr Lys Asn Asn Ile Phe Pro Glu Arg Gly Ser Ile Tyr Asp
 850 855 860
 Phe Tyr Phe Ile Lys Gln Ala Ser Gly His
 865 870

<210> 3798

<211> 184

<212> PRT

<213> Homo sapiens

<400> 3798

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Met Glu Ser Ile Tyr Leu Gln Lys His Leu Gly Ala Cys Leu Thr Gln
  1             5             10             15
Gly Leu Ala Glu Val Ala Arg Val Arg Pro Val Asp Pro Ile Glu Tyr
      20             25             30
Leu Ala Leu Trp Ile Tyr Lys Tyr Lys Glu Asn Val Thr Met Glu Gln
      35             40             45
Leu Arg Gln Lys Glu Met Ala Lys Leu Glu Arg Glu Arg Glu Leu Ala
      50             55             60
Leu Met Glu Gln Glu Met Met Glu Arg Leu Lys Ala Glu Glu Leu Leu
      65             70             75             80
Leu Gln Gln Gln Gln Leu Ala Leu Gln Leu Glu Leu Glu Met Gln Glu
      85             90             95
Lys Glu Arg Gln Arg Ile Gln Glu Leu Gln Arg Ala Gln Glu Gln Leu
      100            105            110
Gly Lys Glu Met Arg Met Asn Met Glu Asn Leu Val Arg Asn Glu Asp
      115            120            125
Ile Leu His Ser Glu Glu Ala Thr Leu Asp Ser Gly Lys Thr Leu Ala
      130            135            140
Glu Ile Ser Asp Arg Tyr Gly Ala Pro Asn Leu Ser Arg Val Glu Glu
      145            150            155            160
Leu Asp Glu Pro Met Phe Ser Asp Val Ser Ile Ser Val Phe Cys Glu
      165            170            175
Lys Thr Arg Phe Cys Phe Cys Phe
      180

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<210> 3799

<211> 127

<212> PRT

<213> Homo sapiens

<400> 3799

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Met Val Met Gly Tyr Ser Ala Gly Ala Leu His Trp Ser Gly Met Val
  1             5             10             15
Cys Gln Cys Arg Ser Tyr Gly Val Gly Pro Gln Ser Pro Gln Asp Cys
          20             25             30
Ser Ala Ser Arg Cys Gly Leu Ala Gly Ala Pro Gly Glu Ala Ser Arg
          35             40             45
Ala Arg Gly Pro Gln Val Gly Leu Ala Leu Phe Asp Gly Gln Asp His
          50             55             60
Pro Ala Glu Phe Arg Ser Asp Asp Ser Pro Arg Ala Lys Val Ser Cys
          65             70             75             80
Gly Ser Lys Leu Ser Leu Val Gly Met Ala Val Pro Gly His Ser Pro
          85             90             95
Leu Gln Thr Leu Leu Arg Pro Thr Leu Trp Ala Pro His Gln Leu Ala
          100            105            110
Cys His Pro Tyr His Phe Ser Lys Gln Leu Ser Leu Thr Thr Arg
          115            120            125

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<210> 3800

<211> 156

<212> PRT

<213> Homo sapiens

<400> 3800

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Met Ser Val Pro Thr Ser Thr Leu Asp Ser Gln Ser Pro Pro Thr Ala
  1             5             10             15
His Thr Ala Lys Cys Thr Ala Leu Cys Ser Leu Met Pro His Gly Ser
          20             25             30
Arg Glu His Ser Val Glu Ile Pro Lys Asp Gln Leu Ala Ser Pro Thr
          35             40             45
Glu Pro Arg Pro Trp Glu Gln Gln Cys Tyr His Gly Asn Gly Gln Ser
          50             55             60

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Tyr Arg Gly Thr Tyr Phe Thr Thr Val Thr Gly Arg Thr Cys Gln Ala
 65 70 75 80
 Trp Ser Ser Met Thr Pro His Gln His Ser Arg Thr Pro Glu Lys Tyr
 85 90 95
 Pro Asn Ala Tyr Val Phe Val Leu Tyr His Lys Arg Arg Lys Gly Gln
 100 105 110
 Leu Lys Phe Leu Leu Glu Glu Ser Cys Phe Glu Leu Thr Ala Gln Asp
 115 120 125
 Ser Thr Cys Val Arg Cys Lys Gly His Ser Lys Met Ser Gln Glu His
 130 135 140
 Cys Leu Gly Ala Lys Ser Leu Arg Glu Glu Lys Tyr
 145 150 155

<210> 3801

<211> 461

<212> PRT

<213> Homo sapiens

<400> 3801

Met Gly Val Ser Gly Pro Leu Val Leu Val Leu Ser Thr Glu Phe Arg
 1 5 10 15
 His Leu Tyr Leu Pro Lys Tyr Glu Gln Thr Thr Tyr Thr Cys Ala His
 20 25 30
 Val Ala Arg Glu Thr Ser Ala Leu Lys Leu Arg Pro Arg Val His Leu
 35 40 45
 Ala Cys Val Leu Ser Val His Thr Pro Thr Lys His Pro Gly Ala Thr
 50 55 60
 Pro Gly Ala Ser Ala Ile Gly Gly Cys Pro Phe Pro Glu Ala Gln Ala
 65 70 75 80
 Pro Pro Ser Pro Ser Arg Ile Leu Arg Phe Pro Trp Gln Leu Val Gln
 85 90 95
 Glu Gln Val Arg Gln Thr Met Ala Glu Ala Leu Lys Val Trp Ser Asp
 100 105 110
 Val Thr Pro Leu Thr Phe Thr Glu Val His Glu Gly Arg Ala Asp Ile
 115 120 125

Met Ile Asp Phe Ala Arg Tyr Trp His Gly Asp Asp Leu Pro Phe Asp
 130 135 140
 Gly Pro Gly Gly Ile Leu Ala His Ala Phe Phe Pro Lys Thr His Arg
 145 150 155 160
 Glu Gly Asp Val His Phe Asp Tyr Asp Glu Thr Trp Thr Ile Gly Asp
 165 170 175
 Asp Gln Gly Thr Asp Leu Leu Gln Val Ala Ala His Glu Phe Gly His
 180 185 190
 Val Leu Gly Leu Gln His Thr Thr Ala Ala Lys Ala Leu Met Ser Ala
 195 200 205
 Phe Tyr Thr Phe Arg Tyr Pro Leu Ser Leu Ser Pro Asp Asp Cys Arg
 210 215 220
 Gly Val Gln His Leu Tyr Gly Gln Pro Trp Pro Thr Val Thr Ser Arg
 225 230 235 240
 Thr Pro Ala Leu Gly Pro Gln Ala Gly Ile Asp Thr Asn Glu Ile Ala
 245 250 255
 Pro Leu Glu Pro Asp Ala Pro Pro Asp Ala Cys Glu Ala Ser Phe Asp
 260 265 270
 Ala Val Ser Thr Ile Arg Gly Glu Leu Phe Phe Phe Lys Ala Gly Phe
 275 280 285
 Val Trp Arg Leu Arg Gly Gly Gln Leu Gln Pro Gly Tyr Pro Ala Leu
 290 295 300
 Ala Ser Arg His Trp Gln Gly Leu Pro Ser Pro Val Asp Ala Ala Phe
 305 310 315 320
 Glu Asp Ala Gln Gly His Ile Trp Phe Phe Gln Gly Ala Gln Tyr Trp
 325 330 335
 Val Tyr Asp Gly Glu Lys Pro Val Leu Gly Pro Ala Pro Leu Thr Glu
 340 345 350
 Leu Gly Leu Val Arg Phe Pro Val His Ala Ala Leu Val Trp Gly Pro
 355 360 365
 Glu Lys Asn Lys Ile Tyr Phe Phe Arg Gly Arg Asp Tyr Trp Arg Phe
 370 375 380
 His Pro Ser Thr Arg Arg Val Asp Ser Pro Val Pro Arg Arg Ala Thr
 385 390 395 400
 Asp Trp Arg Gly Val Pro Ser Glu Ile Asp Ala Ala Phe Gln Asp Ala
 405 410 415

Asp Gly Tyr Ala Tyr Phe Leu Arg Gly Arg Leu Tyr Trp Lys Phe Asp
 420 425 430
 Pro Val Lys Val Lys Ala Leu Glu Gly Phe Pro Arg Leu Val Gly Pro
 435 440 445
 Asp Phe Phe Gly Cys Ala Glu Pro Ala Asn Thr Phe Leu
 450 455 460

<210> 3802

<211> 628

<212> PRT

<213> Homo sapiens

<400> 3802

Met Ala Ala Arg Gln Gln Gln Gln Ile Glu Asn Gln Gln Gln Met Leu
 1 5 10 15
 Val Ala Lys Glu Gln Arg Leu His Phe Leu Lys Gln Gln Glu Arg Arg
 20 25 30
 Gln Gln Gln Ser Ile Ser Glu Asn Glu Lys Leu Gln Lys Leu Lys Glu
 35 40 45
 Arg Val Glu Ala Gln Glu Asn Lys Leu Lys Lys Ile Arg Ala Met Arg
 50 55 60
 Gly Gln Val Asp Tyr Ser Lys Ile Met Asn Gly Asn Leu Ser Ala Glu
 65 70 75 80
 Ile Glu Arg Phe Ser Ala Met Phe Gln Glu Lys Lys Gln Glu Val Gln
 85 90 95
 Thr Ala Ile Leu Arg Val Asp Gln Leu Ser Gln Gln Leu Glu Asp Leu
 100 105 110
 Lys Lys Gly Lys Leu Asn Gly Phe Gln Ser Tyr Asn Gly Lys Leu Thr
 115 120 125
 Gly Pro Ala Ala Val Glu Leu Lys Arg Leu Tyr Gln Glu Leu Gln Ile
 130 135 140
 Arg Asn Gln Leu Asn Gln Glu Gln Asn Ser Lys Leu Gln Gln Gln Lys
 145 150 155 160
 Glu Leu Leu Asn Lys Arg Asn Met Glu Val Ala Met Met Asp Lys Arg
 165 170 175

Ile Ser Glu Leu Arg Glu Arg Leu Tyr Gly Lys Lys Ile Gln Leu Asn
 180 185 190
 Arg Val Asn Gly Thr Ser Ser Pro Gln Ser Pro Leu Ser Thr Ser Gly
 195 200 205
 Arg Val Ala Ala Val Gly Pro Tyr Ile Gln Val Pro Ser Ala Gly Ser
 210 215 220
 Phe Pro Val Leu Gly Asp Pro Ile Lys Pro Gln Ser Leu Ser Ile Ala
 225 230 235 240
 Ser Asn Ala Ala His Gly Arg Ser Lys Ser Ala Asn Asp Gly Asn Trp
 245 250 255
 Pro Thr Leu Lys Gln Asn Ser Ser Ser Ser Val Lys Pro Val Gln Val
 260 265 270
 Ala Gly Ala Asp Trp Lys Asp Pro Ser Val Glu Gly Ser Val Lys Gln
 275 280 285
 Gly Thr Val Ser Ser Gln Pro Val Pro Phe Ser Ala Leu Gly Pro Thr
 290 295 300
 Glu Lys Pro Gly Ile Glu Ile Gly Lys Val Pro Pro Pro Ile Pro Gly
 305 310 315 320
 Val Gly Lys Gln Leu Pro Pro Ser Tyr Gly Thr Tyr Pro Ser Pro Thr
 325 330 335
 Pro Leu Gly Pro Gly Ser Thr Ser Ser Leu Glu Arg Arg Lys Glu Gly
 340 345 350
 Ser Leu Pro Arg Pro Ser Ala Gly Leu Pro Ser Arg Gln Arg Pro Thr
 355 360 365
 Leu Leu Pro Ala Thr Gly Ser Thr Pro Gln Pro Gly Ser Ser Gln Gln
 370 375 380
 Ile Gln Gln Arg Ile Ser Val Pro Pro Ser Pro Thr Tyr Pro Pro Ala
 385 390 395 400
 Gly Pro Pro Ala Phe Pro Ala Gly Asp Ser Lys Pro Glu Leu Pro Leu
 405 410 415
 Thr Val Ala Ile Arg Pro Phe Leu Ala Asp Lys Gly Ser Arg Pro Gln
 420 425 430
 Ser Pro Arg Lys Gly Pro Gln Thr Val Asn Ser Ser Ser Ile Tyr Ser
 435 440 445
 Met Tyr Leu Gln Gln Ala Thr Pro Pro Lys Asn Tyr Gln Pro Ala Ala
 450 455 460

His Ser Ala Leu Asn Lys Ser Val Lys Ala Val Tyr Gly Lys Pro Val
 465 470 475 480
 Leu Pro Ser Gly Ser Thr Ser Pro Ser Pro Leu Pro Phe Leu His Gly
 485 490 495
 Ser Leu Ser Thr Gly Thr Pro Gln Pro Gln Pro Pro Ser Glu Ser Thr
 500 505 510
 Glu Lys Glu Pro Glu Gln Asp Gly Pro Ala Ala Pro Ala Gly Pro Thr
 515 520 525
 Ser Arg Ser Cys Cys Thr Ser Ala Ser Thr Leu Ser Pro Thr Lys Leu
 530 535 540
 Thr Pro Ile Val His Ser Pro Leu Arg Tyr Gln Ser Asp Ala Asp Leu
 545 550 555 560
 Glu Ala Leu Arg Arg Lys Leu Ala Asn Ala Pro Arg Pro Leu Lys Lys
 565 570 575
 Arg Ser Ser Ile Thr Glu Pro Glu Gly Pro Phe Leu Pro Ala Gln Pro
 580 585 590
 Leu Pro Gly Leu His Gly His Leu Gly Arg Cys Gly Gln Trp Lys His
 595 600 605
 Gln Cys Gln Trp Lys Pro Gly Arg Ala Pro Pro Cys Pro Ala His Ser
 610 615 620
 Pro Thr Pro Arg
 625

<210> 3803

<211> 167

<212> PRT

<213> Homo sapiens

<400> 3803

Met Pro Met Lys Pro Pro Arg Cys Thr Arg Thr Ser Arg Ser Ser Cys
 1 5 10 15
 Ser Arg Thr Thr Leu Arg Pro Ala Ala Ser Pro Asn Thr Thr Ser Ser
 20 25 30
 Arg Gly Leu Thr Val His Pro Pro Cys Ser Ser Lys Leu Arg Met Asp
 35 40 45

Pro Thr Pro Ala Trp Pro Ala Ser Cys Glu Ala Leu Met Gly Pro Ser
 50 55 60
 Ser Ser Ala Gly Pro Ala Arg Leu Arg Leu Pro Pro Arg Arg His Ser
 65 70 75 80
 Ser Leu Pro Pro Arg Arg Ala Ser Phe Leu Ile Val Ser Arg Ala Ser
 85 90 95
 Lys Ser Trp Glu Cys Ala Gly Pro Val Pro Ala Leu Pro Gly Gly Val
 100 105 110
 Val Ala Val Pro Thr Ser Gln Gln Asp Pro Gln Cys Arg Gly Ser Gln
 115 120 125
 Val Ala His Arg Arg Cys Leu Ser Arg Ala Ile Leu Gln Ser Gly Pro
 130 135 140
 Gln Cys Gln Ser Cys Leu Ser Ile Trp Val Thr Ser Ala Arg Ser Arg
 145 150 155 160
 Val Gln Ala Ser Ser Arg Ser
 165

<210> 3804

<211> 344

<212> PRT

<213> Homo sapiens

<400> 3804

Met Glu Pro Leu Glu Ile Pro Val Glu Thr Ile Thr Ser Glu Val Ile
 1 5 10 15
 Glu Lys Cys Thr Thr Pro Leu Ser Asp Asp His Asp Glu Lys Tyr Gly
 20 25 30
 Val Pro Ser Leu Glu Glu Leu Gly Phe Asp Thr Asp Gly Leu Ser Ser
 35 40 45
 Ala Val Trp Pro Gly Gly Glu Thr Glu Ala Leu Thr Arg Leu Glu Arg
 50 55 60
 His Leu Glu Arg Lys Ala Trp Val Ala Asn Phe Glu Arg Pro Arg Met
 65 70 75 80
 Asn Ala Asn Ser Leu Leu Ala Ser Pro Thr Gly Leu Ser Pro Tyr Leu
 85 90 95

Arg Phe Gly Cys Leu Ser Cys Arg Leu Phe Tyr Phe Lys Leu Thr Asp
 100 105 110
 Leu Tyr Lys Lys Val Lys Lys Asn Ser Ser Pro Pro Leu Ser Leu Tyr
 115 120 125
 Gly Gln Leu Leu Trp Arg Glu Phe Phe Tyr Thr Ala Ala Thr Asn Asn
 130 135 140
 Pro Arg Phe Asp Lys Met Glu Gly Asn Pro Ile Cys Val Gln Ile Pro
 145 150 155 160
 Trp Asp Lys Asn Pro Glu Ala Leu Ala Lys Trp Ala Glu Gly Arg Thr
 165 170 175
 Gly Phe Pro Trp Ile Asp Ala Ile Met Thr Gln Leu Arg Gln Glu Gly
 180 185 190
 Trp Ile His His Leu Ala Arg His Ala Val Ala Cys Phe Leu Thr Arg
 195 200 205
 Gly Asp Leu Trp Ile Ser Trp Glu Glu Gly Met Lys Val Phe Glu Glu
 210 215 220
 Leu Leu Leu Asp Ala Asp Trp Ser Ile Asn Ala Gly Ser Trp Met Trp
 225 230 235 240
 Leu Ser Cys Ser Ser Phe Phe Gln Gln Phe Phe His Cys Tyr Cys Pro
 245 250 255
 Val Gly Phe Gly Arg Arg Thr Asp Pro Asn Gly Asp Tyr Ile Arg Arg
 260 265 270
 Tyr Leu Pro Val Leu Arg Gly Phe Pro Ala Lys Tyr Ile Tyr Asp Pro
 275 280 285
 Trp Asn Ala Pro Glu Gly Ile Gln Lys Val Ala Lys Cys Leu Ile Gly
 290 295 300
 Val Asn Tyr Pro Lys Pro Met Val Asn His Ala Glu Ala Ser Arg Leu
 305 310 315 320
 Asn Ile Glu Arg Met Lys Gln Ile Tyr Gln Gln Leu Ser Arg Tyr Arg
 325 330 335
 Gly Leu Glu Asn Phe Phe Val Leu
 340

<210> 3805

<211> 485

<212> PRT

<213> Homo sapiens

<400> 3805

Met Asp Asn Glu Cys Val Ala Gln Thr Trp Phe Arg Phe Leu His Met
 1 5 10 15
 Leu Ser Asn Pro Val Asp Leu Ser Asn Pro Ala Ile Ile Ser Ser Thr
 20 25 30
 Pro Lys Phe Gln Glu Gln Phe Leu Asn Val Ser Gly Met Pro Gln Glu
 35 40 45
 Leu Asn Gln Tyr Pro Cys Leu Lys His Leu Pro Gln Ile Phe Phe Arg
 50 55 60
 Ala Met Arg Gly Ile Ser Cys Leu Val Asp Ala Phe Leu Gly Ile Ser
 65 70 75 80
 Arg Pro Arg Ser Asp Ser Ala Pro Pro Thr Pro Val Asn Arg Leu Ser
 85 90 95
 Met Pro Gln Ser Ala Ala Val Ser Thr Thr Pro Pro His Asn Arg Arg
 100 105 110
 His Arg Ala Val Thr Val Asn Lys Ala Thr Met Lys Thr Ser Thr Val
 115 120 125
 Ser Thr Ala His Ala Ser Lys Val Gln His Gln Thr Ser Ser Thr Ser
 130 135 140
 Pro Leu Ser Ser Pro Asn Gln Thr Ser Ser Glu Pro Arg Pro Leu Pro
 145 150 155 160
 Ala Pro Arg Arg Pro Lys Val Asn Ser Ile Leu Asn Leu Phe Gly Ser
 165 170 175
 Trp Leu Phe Asp Ala Ala Phe Val His Cys Lys Leu His Asn Gly Ile
 180 185 190
 Asn Arg Asp Ser Ser Met Thr Ala Ile Thr Thr Gln Ala Ser Met Glu
 195 200 205
 Phe Arg Arg Lys Gly Ser Gln Met Ser Thr Asp Thr Met Val Ser Asn
 210 215 220
 Pro Met Phe Asp Ala Ser Glu Phe Pro Asp Asn Tyr Glu Ala Gly Arg
 225 230 235 240
 Ala Glu Ala Cys Gly Thr Leu Cys Arg Ile Phe Cys Ser Lys Lys Thr

	245		250		255										
Gly	Glu	Glu	Ile	Leu	Pro	Ala	Tyr	Leu	Ser	Arg	Phe	Tyr	Met	Leu	Leu
	260		265		270										
Ile	Gln	Gly	Leu	Gln	Ile	Asn	Asp	Tyr	Val	Cys	His	Pro	Val	Leu	Ala
	275		280		285										
Ser	Val	Ile	Leu	Asn	Ser	Pro	Pro	Leu	Phe	Cys	Cys	Asp	Leu	Lys	Gly
	290		295		300										
Ile	Asp	Val	Val	Val	Pro	Tyr	Phe	Ile	Ser	Ala	Leu	Glu	Thr	Ile	Leu
305			310		315										
Pro	Asp	Arg	Glu	Leu	Ser	Lys	Phe	Lys	Ser	Tyr	Val	Asn	Pro	Thr	Glu
	325		330		335										
Leu	Arg	Arg	Ser	Ser	Ile	Asn	Ile	Leu	Leu	Ser	Leu	Leu	Pro	Leu	Pro
	340		345		350										
His	His	Phe	Gly	Thr	Val	Lys	Ser	Glu	Val	Val	Leu	Glu	Gly	Lys	Phe
	355		360		365										
Ser	Asn	Asp	Asp	Ser	Ser	Ser	His	Asp	Lys	Pro	Ile	Thr	Phe	Leu	Ser
	370		375		380										
Leu	Lys	Leu	Arg	Leu	Val	Asn	Ile	Leu	Ile	Gly	Ala	Leu	Gln	Thr	Glu
385			390		395										
Thr	Asp	Pro	Asn	Asn	Thr	Gln	Met	Ile	Leu	Gly	Ala	Met	Leu	Asn	Ile
	405		410		415										
Val	Gln	Asp	Ser	Ala	Leu	Leu	Glu	Ala	Ile	Gly	Cys	Gln	Met	Glu	Met
	420		425		430										
Gly	Gly	Gly	Glu	Asn	Asn	Leu	Lys	Ser	His	Ser	Arg	Thr	Asn	Ser	Gly
	435		440		445										
Ile	Ser	Ser	Ala	Ser	Gly	Gly	Ser	Thr	Glu	Pro	Thr	Thr	Pro	Asp	Ser
	450		455		460										
Glu	Arg	Pro	Ala	Gln	Ala	Leu	Leu	Arg	Val	Met	Leu	Leu	Ile	Gln	Ile
465			470		475										
Gln	Leu	Leu	Gly	Ser											
	485														

<210> 3806

<211> 142

<212> PRT

<213> Homo sapiens

<400> 3806

Met Phe Ala Cys Ala Lys Leu Ala Cys Thr Pro Ser Leu Ile Arg Ala
 1 5 10 15
 Gly Ser Arg Val Ala Tyr Arg Pro Ile Ser Ala Ser Val Leu Ser Gln
 20 25 30
 Pro Glu Ala Ser Arg Thr Gly Glu Gly Ser Ala Val Phe Asn Gly Ala
 35 40 45
 Gln Asn Gly Val Ser Gln Leu Ile Gln Arg Gly Phe Gln Thr Ser Ala
 50 55 60
 Ile Ser Arg Asp Ile Asp Thr Ala Ala Lys Phe Ile Gly Ala Gly Ala
 65 70 75 80
 Ala Thr Val Gly Val Ala Gly Ser Gly Ala Gly Ile Gly Thr Val Phe
 85 90 95
 Gly Ser Leu Ile Ile Gly Tyr Ala Arg Asn Pro Ser Leu Lys Gln Gln
 100 105 110
 Leu Phe Ser Tyr Ala Ile Leu Gly Phe Ala Leu Ser Glu Ala Met Gly
 115 120 125
 Leu Phe Cys Leu Met Val Ala Phe Leu Ile Leu Phe Ala Met
 130 135 140

<210> 3807

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3807

Met His Ser Lys Leu Ser His Cys Phe Phe Val Pro Leu Thr Cys Ile
 1 5 10 15
 Ser Trp Ile Met Leu Phe Leu Asp Phe Leu Phe Arg Ala Val Arg Ile
 20 25 30
 His Phe Leu Leu Cys His Cys Lys Ile Leu Ala Gly Ser Pro Ile Thr
 35 40 45
 Val Cys Thr Ala Leu Ser Cys Arg Gln Gly Gln Gly Glu Thr Ser Ala

50 55 60
 Met Ala Ser Tyr Val Ala Arg Asn Leu Leu Met Ser Pro Ser Lys Thr
 65 70 75 80
 Val Gly Pro Ala Ser Ala Arg Pro Cys Ala Leu Lys Ser Ser Pro Tyr
 85 90 95
 Gly Glu Met Gly Leu Gly
 100

<210> 3808

<211> 101

<212> PRT

<213> Homo sapiens

<400> 3808

Met Pro Pro Arg Ser Leu Ser Cys His His Gly Thr Gly Trp Ala Trp
 1 5 10 15
 Arg Phe Gly Arg His Trp Lys Leu Arg Gly Glu Glu Ala Gly His Leu
 20 25 30
 Arg Gly Leu Gly His Leu Gly Gly Gln Gly Glu Arg Phe Gly Gly His
 35 40 45
 Gly Ala Gly Arg Phe Gly Ala Leu Gly Glu Asp Phe Gln Gly Leu Gly
 50 55 60
 Ser Pro Gly Gly Gly Ala Glu Arg Gly Gln Arg Ser Leu Asn Ser Arg
 65 70 75 80
 Pro Pro Trp Leu His Pro Gly Asn Gly Pro Leu Leu Leu Arg His Arg
 85 90 95
 Asp Ala Val Ala His
 100

<210> 3809

<211> 131

<212> PRT

<213> Homo sapiens

<400> 3809

Met Arg Glu Phe Ser Leu Ile Glu Leu Trp Leu Met Pro Lys Val Phe
 1 5 10 15
 Asn His Tyr Val Trp Gly Ser Phe Leu Val Gln Arg Lys Lys Lys Gln
 20 25 30
 Pro Lys Ser Val Leu Val Tyr His Cys Thr Ser Gly Asn Leu Asn Pro
 35 40 45
 Cys Asn Arg Gly Lys Met Gly Phe Gln Val Leu Ala Thr Phe Glu Ile
 50 55 60
 Pro Ile Pro Phe Glu Arg Ala Leu Thr Arg Pro Tyr Ala Asp Phe Thr
 65 70 75 80
 Thr Ser Asn Phe Arg Thr Gln Tyr Trp Asn Ala Ile Ser Gln Gln Ala
 85 90 95
 Pro Ala Ile Ile Tyr Asp Phe Tyr Leu Trp Leu Thr Gly Arg Lys Pro
 100 105 110
 Ser Tyr Arg Arg Lys Ile Pro Ser Ser Thr Gln Phe Tyr Lys Trp Arg
 115 120 125
 Asn Arg Ser
 130

<210> 3810

<211> 140

<212> PRT

<213> Homo sapiens

<400> 3810

Met Pro Asn Pro Asp Gly Tyr Ile Ile Cys Trp Leu Gln Val Ser Leu
 1 5 10 15
 Thr Ala Arg Phe Ala Ser Ala Glu Lys Ser His Gly Glu Ser Arg Thr
 20 25 30
 His Glu Val Leu Ser His Ile Cys Thr Ser Gly Val Val Ala Val His
 35 40 45
 Ser Pro Leu Asp Ala Val Ser Trp Pro Cys Phe His Pro Ile Pro Val
 50 55 60
 Gly Arg Val Gly Gly Trp Val Gly Glu Ala Ile Glu Cys Met Thr Gln

65 70 75 80
 Thr Lys Leu Ser Trp Ala Phe Ser Pro Thr Arg Glu Ala Leu Met Ser
 85 90 95
 Phe Ile Glu Ala Leu Lys His Gln Ser Leu Ser Gln Ala Ser Ser Gln
 100 105 110
 Thr Phe Cys Asn Met Ser Ala Leu Thr Arg Phe Lys Ala Asn Val Phe
 115 120 125
 Pro Cys Arg Glu Glu Gly Ala Leu Arg Leu Ile Asp
 130 135 140

<210> 3811

<211> 157

<212> PRT

<213> Homo sapiens

<400> 3811

Met Lys Leu Lys Cys Ile Phe Gly Phe Ala Thr Lys Glu Thr Ser Cys
 1 5 10 15
 Tyr Asn Val Thr Asn Ile Gly Phe Lys Ser Pro Ser Asp Phe Trp Gln
 20 25 30
 Ser Val His Ser Thr Leu Pro Arg Glu Leu Ala Pro Cys Leu Val Phe
 35 40 45
 Asn Thr Ser Pro Asn Leu Ala Leu Phe Ser Ala Ala Phe Ala Phe Ile
 50 55 60
 Val Val Lys Asp Ser Ala Gly Asp Ser Asp Val Val Val Gln Glu Leu
 65 70 75 80
 Lys Ser Met Val Ala Thr Lys Ile Ala Lys Tyr Ala Val Pro Asp Glu
 85 90 95
 Ile Leu Val Val Lys Arg Leu Pro Lys Thr Arg Ser Gly Lys Val Met
 100 105 110
 Arg Arg Leu Leu Arg Lys Ile Ile Thr Ser Glu Ala Gln Glu Leu Gly
 115 120 125
 Asp Thr Thr Thr Leu Glu Asp Pro Ser Ile Ile Ala Glu Ile Leu Ser
 130 135 140
 Val Tyr Gln Lys Cys Lys Asp Lys Gln Ala Ala Ala Lys

145

150

155

<210> 3812

<211> 1591

<212> PRT

<213> Homo sapiens

<400> 3812

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Met Val Gln Gly Arg Val Thr Glu Val Lys Phe Pro Leu Glu His Tyr
  1              5              10             15
Ile Leu Glu Leu Gln Asp His Arg Val Ala Leu Asn Gly Ser His Ser
      20              25             30
Glu Lys Val Ala Ile Leu Asp Asp Lys Thr Ala Met Val Thr Ala Ser
      35              40             45
Gln Leu Gly Gln Thr Asn Leu Val Phe Val His Lys Asn Val His Met
      50              55             60
Arg Ser Val Ser Gly Leu Pro Asn Cys Thr Ile Tyr Val Val Glu Pro
      65              70             75             80
Gly Phe Leu Gly Phe Thr Val Gln Pro Gly Asn Arg Trp Ser Leu Glu
      85              90             95
Val Gly Gln Val Tyr Val Ile Thr Val Asp Val Phe Asp Lys Ser Ser
      100             105             110
Thr Lys Val Tyr Ile Ser Asp Asn Leu Arg Ile Thr Tyr Asp Phe Pro
      115             120             125
Lys Glu Tyr Phe Glu Glu Gln Leu Thr Thr Val Asn Gly Ser Tyr His
      130             135             140
Ile Val Lys Ala Leu Lys Asp Gly Val Val Val Ile Asn Ala Ser Leu
      145             150             155             160
Thr Ser Ile Ile Tyr Gln Asn Lys Asp Ile Gln Pro Ile Lys Phe Leu
      165             170             175
Ile Lys His Gln Gln Glu Val Lys Ile Tyr Phe Pro Ile Met Leu Thr
      180             185             190
Pro Lys Phe Leu Ala Phe Pro His His Pro Met Gly Met Leu Tyr Arg
      195             200             205
Tyr Lys Val Gln Val Glu Gly Gly Ser Gly Asn Phe Thr Trp Thr Ser

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210	215	220	
Ser Asn Glu Thr Val Val Ile Val Thr Thr Lys Gly Val Val Thr Ala			
225	230	235	240
Gly Gln Val Arg Gly Asn Ser Thr Val Leu Ala Arg Asp Val Gln Asn			
	245	250	255
Pro Phe Arg Tyr Gly Glu Ile Lys Ile His Val Leu Lys Leu Asn Lys			
	260	265	270
Met Glu Leu Leu Pro Phe His Ala Asp Val Glu Ile Gly Gln Ile Ile			
	275	280	285
Glu Ile Pro Ile Ala Met Tyr His Ile Asn Lys Glu Thr Lys Glu Ala			
	290	295	300
Met Ala Phe Thr Asp Cys Ser His Leu Ser Leu Asp Leu Asn Met Asp			
305	310	315	320
Lys Gln Gly Val Phe Thr Leu Leu Lys Glu Gly Ile Gln Arg Pro Gly			
	325	330	335
Pro Met His Cys Ser Ser Thr His Ile Ala Ala Lys Ser Leu Gly His			
	340	345	350
Thr Leu Val Thr Val Ser Val Asn Glu Cys Asp Lys Tyr Leu Glu Ser			
	355	360	365
Ser Ala Thr Phe Ala Ala Tyr Glu Pro Leu Lys Ala Leu Asn Pro Val			
	370	375	380
Glu Val Ala Leu Val Thr Trp Gln Ser Val Lys Glu Met Val Phe Glu			
385	390	395	400
Gly Gly Pro Arg Pro Trp Ile Leu Glu Pro Ser Arg Phe Phe Leu Glu			
	405	410	415
Leu Asn Ala Glu Lys Thr Glu Lys Ile Gly Ile Ala Gln Val Trp Leu			
	420	425	430
Pro Ser Lys Arg Lys Gln Asn Gln Tyr Ile Tyr Arg Ile Gln Cys Leu			
	435	440	445
Asp Leu Gly Glu Gln Val Leu Thr Phe Arg Ile Gly Asn His Pro Gly			
	450	455	460
Val Leu Asn Pro Ser Pro Ala Val Glu Val Leu Gln Val Arg Phe Ile			
465	470	475	480
Cys Ala His Pro Ala Ser Met Ser Val Thr Pro Val Tyr Lys Val Pro			
	485	490	495
Ala Gly Ala Gln Pro Cys Pro Leu Pro Gln His Asn Lys Trp Leu Ile			

500	505	510
Pro Val Ser Arg Leu Arg Asp Thr Val Leu Glu Leu Ala Val Phe Asp		
515	520	525
Gln His Arg Arg Lys Phe Asp Asn Phe Ser Ser Leu Met Leu Glu Trp		
530	535	540
Lys Ser Ser Asn Glu Thr Leu Ala His Phe Glu Asp Tyr Lys Ser Val		
545	550	555
Glu Met Val Ala Lys Asp Gly Gly Ser Gly Gln Thr Arg Leu His Gly		
565	570	575
His Gln Ile Leu Lys Val His Gln Ile Lys Gly Thr Val Leu Ile Gly		
580	585	590
Val Asn Phe Val Gly Tyr Ser Glu Lys Lys Ser Pro Lys Glu Ile Ser		
595	600	605
Asn Leu Pro Arg Ser Val Asp Val Glu Leu Leu Leu Val Asp Asp Val		
610	615	620
Thr Val Val Pro Glu Asn Ala Thr Ile Tyr Asn His Pro Asp Val Lys		
625	630	635
Glu Thr Phe Ser Leu Val Glu Gly Ser Gly Tyr Phe Leu Val Asn Ser		
645	650	655
Ser Glu Gln Gly Val Val Thr Ile Thr Tyr Met Glu Ala Glu Ser Ser		
660	665	670
Val Glu Leu Val Pro Leu His Pro Gly Phe Phe Thr Leu Glu Val Tyr		
675	680	685
Asp Leu Cys Leu Ala Phe Leu Gly Pro Ala Thr Ala His Leu Arg Val		
690	695	700
Ser Asp Ile Gln Glu Leu Glu Leu Asp Leu Ile Asp Lys Val Glu Ile		
705	710	715
Asp Lys Thr Val Leu Val Thr Val Arg Val Leu Gly Ser Ser Lys Arg		
725	730	735
Pro Phe Gln Asn Lys Tyr Phe Arg Asn Met Glu Leu Lys Leu Gln Leu		
740	745	750
Ala Ser Ala Ile Val Thr Leu Thr Pro Met Glu Gln Gln Asp Glu Tyr		
755	760	765
Ser Glu Asn Tyr Ile Leu Arg Ala Thr Thr Ile Gly Gln Thr Thr Leu		
770	775	780

Val Ala Ile Ala Lys Asp Lys Met Gly Arg Lys Tyr Thr Ser Thr Pro
 785 790 795 800
 Arg His Ile Glu Val Phe Pro Pro Phe Arg Leu Leu Pro Glu Lys Met
 805 810 815
 Thr Leu Ile Pro Met Asn Met Met Gln Val Met Ser Glu Gly Gly Pro
 820 825 830
 Gln Pro Gln Ser Ile Val His Phe Ser Ile Ser Asn Gln Thr Val Ala
 835 840 845
 Val Val Asn Arg Arg Gly Gln Val Thr Gly Lys Ile Val Gly Thr Ala
 850 855 860
 Val Val His Gly Thr Ile Gln Thr Val Asn Glu Asp Thr Gly Lys Val
 865 870 875 880
 Ile Val Phe Ser Gln Asp Glu Val Gln Ile Glu Val Val Gln Leu Arg
 885 890 895
 Ala Val Arg Ile Leu Ala Ala Ala Thr Arg Leu Ile Thr Ala Thr Lys
 900 905 910
 Met Pro Val Tyr Val Met Gly Val Thr Ser Thr Gln Thr Pro Phe Ser
 915 920 925
 Phe Ser Asn Ala Asn Pro Gly Leu Thr Phe His Trp Ser Met Ser Lys
 930 935 940
 Arg Asp Val Leu Asp Leu Val Pro Arg His Ser Glu Val Phe Leu Gln
 945 950 955 960
 Leu Pro Val Glu His Asn Phe Ala Met Val Val His Thr Lys Ala Ala
 965 970 975
 Gly Arg Thr Ser Ile Lys Val Thr Val His Cys Met Asn Ser Ser Ser
 980 985 990
 Gly Gln Phe Glu Gly Asn Leu Leu Glu Leu Ser Asp Glu Val Gln Ile
 995 1000 1005
 Leu Val Phe Glu Lys Leu Gln Leu Phe Tyr Pro Glu Cys Gln Pro Glu
 1010 1015 1020
 Gln Ile Leu Met Pro Ile Asn Ser Gln Leu Lys Leu His Thr Asn Arg
 1025 1030 1035 1040
 Glu Gly Ala Ala Phe Val Ser Ser Arg Val Leu Lys Cys Phe Pro Asn
 1045 1050 1055
 Ser Ser Val Ile Glu Glu Asp Gly Glu Gly Leu Leu Lys Ala Gly Ser
 1060 1065 1070

Ile Ala Gly Thr Ala Val Leu Glu Val Thr Ser Ile Glu Pro Phe Gly			
1075	1080	1085	
Val Asn Gln Thr Thr Ile Thr Gly Val Gln Val Ala Pro Val Thr Tyr			
1090	1095	1100	
Leu Arg Val Ser Ser Gln Pro Lys Leu Tyr Thr Ala Gln Gly Arg Thr			
1105	1110	1115	1120
Leu Ser Ala Phe Pro Leu Gly Met Ser Leu Thr Phe Thr Val Gln Phe			
	1125	1130	1135
Tyr Asn Ser Ile Gly Glu Lys Phe His Thr His Asn Thr Gln Leu Tyr			
	1140	1145	1150
Leu Ala Leu Asn Arg Asp Asp Leu Leu His Ile Gly Pro Gly Asn Lys			
	1155	1160	1165
Asn Tyr Thr Tyr Met Ala Gln Ala Val Asn Arg Gly Leu Thr Leu Val			
	1170	1175	1180
Gly Leu Trp Asp Arg Arg His Pro Gly Met Ala Asp Tyr Ile Pro Val			
1185	1190	1195	1200
Ala Val Glu His Ala Ile Glu Pro Asp Thr Lys Leu Thr Phe Val Gly			
	1205	1210	1215
Asp Ile Ile Cys Phe Ser Thr His Leu Val Ser Gln His Gly Glu Pro			
	1220	1225	1230
Gly Ile Trp Met Ile Ser Ala Asn Asn Ile Leu Gln Thr Asp Ile Val			
	1235	1240	1245
Thr Gly Val Gly Val Ala Arg Ser Pro Gly Thr Ala Met Ile Phe His			
	1250	1255	1260
Asp Ile Pro Gly Val Val Lys Thr Tyr Arg Glu Val Val Val Asn Ala			
1265	1270	1275	1280
Ser Ser Arg Leu Met Leu Ser Tyr Asp Leu Lys Thr Tyr Leu Thr Asn			
	1285	1290	1295
Thr Leu Asn Ser Thr Val Phe Lys Leu Phe Ile Thr Thr Gly Arg Asn			
	1300	1305	1310
Gly Val Asn Leu Lys Gly Phe Cys Thr Pro Asn Gln Ala Leu Ala Ile			
	1315	1320	1325
Thr Lys Val Leu Leu Pro Ala Thr Leu Met Leu Cys His Val Gln Phe			
	1330	1335	1340
Ser Asn Thr Leu Leu Asp Ile Pro Ala Ser Lys Val Phe Gln Val His			
1345	1350	1355	1360

Ser Asp Phe Ser Met Glu Lys Gly Val Tyr Val Cys Ile Ile Lys Val
 1365 1370 1375
 Arg Pro Gln Ser Glu Glu Leu Leu Gln Ala Leu Ser Val Ala Asp Thr
 1380 1385 1390
 Ser Val Tyr Gly Trp Ala Thr Leu Val Ser Glu Arg Ser Lys Asn Gly
 1395 1400 1405
 Met Gln Arg Ile Leu Ile Pro Phe Ile Pro Ala Phe Tyr Ile Asn Gln
 1410 1415 1420
 Ser Glu Leu Val Leu Ser His Lys Gln Asp Ile Gly Glu Ile Arg Val
 1425 1430 1435 1440
 Leu Gly Val Asp Arg Val Leu Arg Lys Leu Glu Val Ile Ser Ser Ser
 1445 1450 1455
 Pro Val Leu Val Val Ala Gly His Ser His Ser Pro Leu Thr Pro Gly
 1460 1465 1470
 Leu Ala Ile Tyr Ser Val Arg Val Val Asn Phe Thr Ser Phe Gln Gln
 1475 1480 1485
 Met Ala Ser Pro Val Phe Ile Asn Ile Ser Cys Val Leu Thr Ser Gln
 1490 1495 1500
 Ser Glu Ala Val Val Val Arg Ala Met Lys Asp Lys Leu Gly Ala Asp
 1505 1510 1515 1520
 His Cys Glu Asp Ser Ala Ile Leu Lys Arg Phe Thr Gly Ser Tyr Gln
 1525 1530 1535
 Ile Leu Leu Leu Thr Leu Phe Ala Val Leu Ala Ser Thr Ala Ser Ile
 1540 1545 1550
 Phe Leu Ala Tyr Ser Ala Phe Leu Asn Lys Ile Gln Thr Val Pro Val
 1555 1560 1565
 Val Tyr Val Pro Thr Leu Gly Thr Pro Gln Pro Gly Phe Leu Thr Pro
 1570 1575 1580
 Gln Val Leu Pro Leu Thr Ser
 1585 1590

<210> 3813

<211> 623

<212> PRT

<213> Homo sapiens

<400> 3813

Met Ser Asp Leu Arg Val Gln Leu Asn Phe Ser Ala Met Ala Ser Glu
 1 5 10 15
 Leu Glu Glu Val Lys Arg Cys Met Glu Arg Lys Asp Lys Glu Lys Ala
 20 25 30
 His Leu Ala Ser Gln Val Glu Asn Leu Thr Arg Glu Leu Glu Asn Gly
 35 40 45
 Glu Lys Gln Gln Leu Gln Met Leu Asp Arg Leu Lys Glu Ile Gln Asn
 50 55 60
 His Phe Asp Thr Cys Glu Ala Glu Arg Lys His Ala Asp Leu Gln Ile
 65 70 75 80
 Ser Glu Leu Thr Arg His Ala Glu Asp Ala Thr Lys Gln Ala Glu Arg
 85 90 95
 Tyr Leu Ser Glu Leu Gln Gln Ser Glu Ala Leu Lys Glu Glu Ala Glu
 100 105 110
 Lys Arg Arg Glu Asp Leu Lys Leu Lys Ala Gln Glu Ser Ile Arg Gln
 115 120 125
 Trp Lys Leu Lys His Lys Lys Leu Glu Arg Ala Leu Glu Lys Gln Ser
 130 135 140
 Glu Thr Val Asp Glu Leu Thr Gly Lys Asn Asn Gln Ile Leu Lys Glu
 145 150 155 160
 Lys Asp Glu Leu Lys Thr Gln Leu Tyr Ala Ala Leu Gln Gln Ile Glu
 165 170 175
 Asn Leu Arg Lys Glu Leu Asn Asp Val Leu Thr Lys Arg Ala Leu Gln
 180 185 190
 Glu Glu Glu Leu His Ser Lys Glu Glu Lys Leu Arg Asp Ile Lys Ser
 195 200 205
 His Gln Ala Asp Leu Glu Leu Glu Val Lys Asn Ser Leu Asp Thr Ile
 210 215 220
 His Arg Leu Glu Ser Glu Leu Lys Lys Gln Ser Lys Ile Gln Ser Gln
 225 230 235 240
 Met Lys Val Glu Lys Ala His Leu Glu Glu Glu Ile Ala Glu Leu Lys
 245 250 255
 Lys Ser Gln Ala Gln Asp Lys Ala Lys Leu Leu Glu Met Gln Glu Ser
 260 265 270

Ile Lys Asp Leu Ser Ala	Ile Arg Ala Asp Leu Ala	Asn Lys Leu Ala
275	280	285
Glu Glu Glu Arg Ala Lys Lys Ala Val Leu Lys Asp Leu Ser Asp Leu		
290	295	300
Thr Ala Gln Ala Lys Ser Arg Asp Glu Glu Thr Ala Thr Ile Ile Thr		
305	310	315
Gln Leu Lys Leu Glu Arg Asp Val His Gln Arg Glu Leu Lys Asp Leu		
325	330	335
Thr Ser Ser Leu Gln Ser Val Lys Thr Lys His Glu Gln Asn Ile Gln		
340	345	350
Glu Leu Met Lys His Phe Lys Lys Glu Lys Ser Glu Ala Glu Asn His		
355	360	365
Ile Arg Thr Leu Lys Ala Glu Ser Leu Glu Glu Lys Asn Met Ala Lys		
370	375	380
Ile His Arg Gly Gln Leu Glu Lys Leu Lys Ser Gln Cys Asp Arg Leu		
385	390	395
Thr Glu Glu Leu Thr Gln Asn Glu Asn Glu Asn Lys Lys Leu Lys Leu		
405	410	415
Lys Tyr Gln Cys Leu Lys Asp Gln Leu Glu Glu Arg Glu Lys His Ile		
420	425	430
Ser Ile Glu Glu Glu His Leu Arg Arg Met Glu Glu Ala Arg Leu Gln		
435	440	445
Leu Lys Asp Gln Leu Leu Cys Leu Glu Thr Glu Gln Glu Ser Ile Leu		
450	455	460
Gly Val Ile Gly Lys Glu Ile Asp Ala Ala Cys Lys Thr Phe Ser Lys		
465	470	475
Asp Ser Val Glu Lys Leu Lys Val Phe Ser Ser Gly Pro Asp Ile His		
485	490	495
Tyr Asp Pro His Arg Trp Leu Ala Glu Ser Lys Thr Lys Leu Gln Trp		
500	505	510
Leu Cys Glu Glu Leu Lys Glu Arg Glu Asn Arg Glu Lys Asn Leu Arg		
515	520	525
His Gln Leu Met Leu Cys Arg Gln Gln Leu Arg Asn Leu Thr Glu Asn		
530	535	540
Lys Glu Ser Glu Leu Gln Cys Leu Phe Gln Gln Ile Glu Arg Gln Glu		
545	550	555
		560

Gln Leu Leu Asp Glu Ile His Arg Glu Lys Arg Asp Leu Leu Glu Glu
 565 570 575
 Thr Gln Arg Lys Asp Glu Glu Met Gly Ser Leu Gln Asp Arg Val Ile
 580 585 590
 Ala Leu Glu Thr Ser Thr Gln Val Ala Leu Asp His Leu Glu Ser Val
 595 600 605
 Pro Glu Lys Leu Ser Leu Leu Glu Asp Phe Lys Asp Phe Arg Arg
 610 615 620

<210> 3814

<211> 155

<212> PRT

<213> Homo sapiens

<400> 3814

Met Asp Ala Glu Leu Leu Gly Arg Glu Leu Arg Leu Phe Leu Phe Ser
 1 5 10 15
 Pro Gln Glu Lys Asn Ser Phe Ser Asp Val Phe Val Val Gly Glu Tyr
 20 25 30
 Phe Cys His Cys Phe Glu Lys Thr Ser Pro Pro Asn Ser Pro Ser Phe
 35 40 45
 Leu Gly Ile Ser Phe Leu Lys Trp Lys Ala Phe Asn Ile His Ser Lys
 50 55 60
 Leu Ala Leu Leu Leu Pro Gln Gly Lys Ile Thr Ser Lys Gln Arg Cys
 65 70 75 80

 Leu Pro Ser Val Ser Gly Gly Ala Ser Leu Arg Gly Gly Leu Cys Asp
 85 90 95
 Pro Leu Pro Gly Gly Gly Asp Gly Gly His Leu Phe Ile Asn Asp Val
 100 105 110
 Arg Leu Lys Val Thr Glu Pro Phe Leu His Met Pro Leu Cys Arg Glu
 115 120 125
 Leu Cys Ile Asn Thr Leu Leu Gly Arg Thr Glu Gln Asp Trp Glu Leu
 130 135 140
 Arg Ala Asn Pro Phe Leu Arg Ala Ser Asn Ser

145

150

155

<210> 3815

<211> 577

<212> PRT

<213> Homo sapiens

<400> 3815

Met Arg Trp Gly Met Pro Pro Gln Asp Ala Phe Thr Thr Gln Trp Leu
 1 5 10 15
 Val Arg Asp Leu Arg Gly Lys Thr Glu Lys Glu Phe Lys Ala Tyr Val
 20 25 30
 Ser Leu Phe Met Arg His Leu Cys Glu Pro Gly Ala Asp Gly Ser Glu
 35 40 45
 Thr Phe Ala Asp Gly Val Pro Arg Glu Gly Leu Ser Arg Gln Gln Val
 50 55 60
 Leu Thr Arg Ile Gly Val Met Ser Leu Val Lys Lys Lys Val Gln Glu
 65 70 75 80
 Phe Glu His Ile Asn Gly Arg Trp Ser Met Pro Glu Leu Met Pro Asp
 85 90 95
 Pro Ser Ala Asp Ser Lys Arg Ser Ser Arg Ala Ser Ser Pro Thr Lys
 100 105 110
 Thr Ser Pro Thr Thr Pro Glu Ala Ser Ala Thr Asn Ser Pro Cys Thr
 115 120 125
 Ser Lys Pro Ala Thr Pro Ala Pro Ser Glu Lys Gly Glu Gly Ile Arg
 130 135 140
 Thr Pro Leu Glu Lys Glu Glu Ala Glu Asn Gln Glu Glu Lys Pro Glu
 145 150 155 160
 Lys Asn Ser Arg Ile Gly Glu Lys Met Glu Thr Glu Ala Asp Ala Pro
 165 170 175
 Ser Pro Ala Pro Ser Leu Gly Glu Arg Leu Glu Pro Arg Lys Ile Pro
 180 185 190
 Leu Glu Asp Glu Val Pro Gly Val Pro Gly Glu Met Glu Pro Glu Pro
 195 200 205
 Gly Tyr Arg Gly Asp Arg Glu Lys Ser Ala Thr Glu Ser Thr Pro Gly

210	215	220	
Glu Arg Gly Glu Glu Lys Pro Leu Asp Gly Gln Glu His Arg Glu Arg			
225	230	235	240
Pro Glu Gly Glu Thr Gly Asp Leu Gly Lys Arg Ala Glu Asp Val Lys			
	245	250	255
Gly Asp Arg Glu Leu Arg Pro Gly Pro Arg Asp Glu Pro Arg Ser Asn			
	260	265	270
Gly Arg Arg Glu Glu Lys Thr Glu Lys Pro Arg Phe Met Phe Asn Ile			
	275	280	285
Ala Asp Gly Gly Phe Thr Glu Leu His Thr Leu Trp Gln Asn Glu Glu			
290	295	300	
Arg Ala Ala Ile Ser Ser Gly Lys Leu Asn Glu Ile Trp His Arg Arg			
305	310	315	320
His Asp Tyr Trp Leu Leu Ala Gly Ile Val Leu His Gly Tyr Ala Arg			
	325	330	335
Trp Gln Asp Ile Gln Asn Asp Ala Gln Phe Ala Ile Ile Asn Glu Pro			
	340	345	350
Phe Lys Thr Glu Ala Asn Lys Gly Asn Phe Leu Glu Met Lys Asn Lys			
	355	360	365
Phe Leu Ala Arg Arg Phe Lys Leu Leu Glu Gln Ala Leu Val Ile Glu			
370	375	380	
Glu Gln Leu Arg Arg Ala Ala Tyr Leu Asn Leu Ser Gln Glu Pro Ala			
385	390	395	400
His Pro Ala Met Ala Leu His Ala Arg Phe Ala Glu Ala Glu Cys Leu			
	405	410	415
Ala Glu Ser His Gln His Leu Ser Lys Glu Ser Leu Ala Gly Asn Lys			
	420	425	430
Pro Ala Asn Ala Val Leu His Lys Val Leu Asn Gln Leu Glu Glu Leu			
	435	440	445
Leu Ser Asp Met Lys Ala Asp Val Thr Arg Leu Pro Ala Thr Leu Ser			
450	455	460	
Arg Ile Pro Pro Ile Ala Ala Arg Leu Gln Met Ser Glu Arg Ser Ile			
465	470	475	480
Leu Ser Arg Leu Ala Ser Lys Gly Thr Glu Pro His Pro Thr Pro Ala			
	485	490	495
Tyr Pro Pro Gly Pro Tyr Ala Thr Pro Pro Gly Tyr Gly Ala Ala Phe			

500 505 510
 Ser Ala Ala Pro Val Gly Ala Leu Ala Ala Ala Gly Ala Asn Tyr Ser
 515 520 525
 Gln Met Pro Ala Gly Ser Phe Ile Thr Ala Ala Thr Asn Gly Pro Pro
 530 535 540
 Val Leu Val Lys Lys Glu Lys Glu Met Val Gly Ala Leu Val Ser Asp
 545 550 555 560
 Gly Leu Asp Arg Lys Glu Pro Arg Ala Gly Glu Val Ile Cys Ile Asp
 565 570 575
 Asp

<210> 3816

<211> 143

<212> PRT

<213> Homo sapiens

<400> 3816

Met Thr Ser Ala Lys Thr Leu Arg Gly Arg His Ser Ser Thr Lys Thr
 1 5 10 15
 Leu Phe Pro Ser Glu Val Pro Phe Thr Gly Thr Gly Val Arg Thr Ser
 20 25 30
 Pro Cys Leu Leu Gly Ala Ile Pro Phe Asn Leu Gln Gln Pro Leu Val
 35 40 45
 Ser Val His Asn Ala Asn Glu Val Arg Val Ala Ser Pro Gln Ala Asn
 50 55 60
 Asn Phe Pro Gln Ile Ala Ala Arg Cys Gly Pro Ala Lys Ser Gln Gly
 65 70 75 80
 Ala Ala Ile Ser Lys Gln Ser Pro Pro Val Leu Glu Gly Val Cys Arg
 85 90 95
 Asp Ala Ser Gly Glu Arg Pro Gly Pro Gly Ala Gly Leu Gln Leu Trp
 100 105 110
 Asp Lys Leu Leu Ser Gly Pro Gly Ala Thr Gln Arg Arg Gln Ala Ala
 115 120 125

Val Gln Val Lys Pro Ile Gln His Leu Ala Pro Cys Leu Gln Ala
 130 135 140

<210> 3817

<211> 123

<212> PRT

<213> Homo sapiens

<400> 3817

Met Lys Tyr Phe Ala Pro Ser Arg Gly Pro Gln Leu Ser Leu Gln Val
 1 5 10 15
 Leu Leu Trp Arg Leu Asn Leu Pro Pro Val Ser Arg Ser Ser Gln Leu
 20 25 30
 Ser Leu Leu Ser Phe Leu Gly Arg Trp Asn Phe Leu Arg Pro Arg Arg
 35 40 45
 Pro Pro Thr Leu Pro Pro Glu Ser Ser Ile Glu Ser Val Ala Gln Thr
 50 55 60
 Pro Leu Asn His Glu Val Thr Val Gln Thr Gln Gly Glu Asp Gln Ala
 65 70 75 80
 His Tyr Thr Leu Pro Ser Ile Thr Val Lys Pro Ala Asp Val Glu Ile
 85 90 95
 Ser Ile Thr Ser Glu Pro Thr Thr Asp Thr Asp Ser Ser Pro Ala Gln
 100 105 110
 Gln Ala Ala Pro Asn Gln His Pro Glu Gln Val
 115 120

<210> 3818

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3818

Met Ala Gly Gly Arg Pro Ala Asn Lys Ala Pro Gly Thr Gly Leu Gly

1	5	10	15
Gly Thr Pro Gly Val Pro Ser Trp Val Gly Trp Thr Gly Pro Trp Phe			
	20	25	30
Ala Gly Ser Cys Ala Ala Met Arg Leu Leu Ala Gly Gly Ile Arg Gln			
	35	40	45
Pro Pro Ala Ser Leu Ala Gln Val Leu Asp Ser Ile Lys Gly Gln Ser			
	50	55	60
Val Phe Phe Met Leu Thr Ser Met Arg Lys Pro Asn Ala Ser Phe Ser			
65	70	75	80
Glu Ser Ala Gln Ile Tyr Ser Ala Glu Tyr Arg Phe Val Gln Thr Thr			
	85	90	95
Ala Ala Leu Gln Phe Ile Val Thr Ser Lys Gly Lys Gly Gln Lys Asn			
	100	105	110
Ile			

<210> 3819

<211> 119

<212> PRT

<213> Homo sapiens

<400> 3819

Met Trp His Val Thr Ala Tyr Phe Ser Leu Leu Leu Arg Ala Pro Ser			
1	5	10	15
Glu Gly Ile Gln Ile Pro Val Ile His Thr Ile Glu Val Lys Ser Phe			
	20	25	30
Gln Ile Arg Lys Ala Gln Phe Phe Leu Gln Arg Cys Leu Phe Ile Phe			
	35	40	45
Ile Val Ser Ile Ser Phe Lys Asn Leu His Glu Glu Ser Ile Cys Phe			
	50	55	60
Cys Leu Lys Glu Asn Ser Pro Gly Phe Glu Leu Asn Ser Ala Leu Ala			
65	70	75	80
Arg Leu Tyr Pro Phe Pro Lys Glu Lys Ser Lys Val Ser Thr Tyr Ser			
	85	90	95
Lys Arg Met Ser Pro Gly Phe Ser Ile Leu Glu Ser Leu Ile Ser Pro			

100 105 110
 Thr Ile Leu Glu Arg Ser Lys
 115

<210> 3820

<211> 358

<212> PRT

<213> Homo sapiens

<400> 3820

Met Asn Thr Ala Asn Ser Leu Cys Leu Gly Gly Thr Pro Ala Ser Ala
 1 5 10 15
 Ser Ser Ser Ser Ser Arg Ala Ala Pro Leu Val Thr Ser Gly Lys Ala
 20 25 30
 Pro Pro Asn Leu Pro Gln Gly Val Pro Pro Leu Leu His Asn Gln Tyr
 35 40 45
 Leu Val Gly Pro Gly Gly Leu Leu Pro Ala Tyr Pro Ile Tyr Gly Tyr
 50 55 60
 Asp Glu Leu Gln Met Leu Gln Ser Arg Leu Pro Val Asp Tyr Tyr Gly
 65 70 75 80
 Ile Pro Phe Ala Ala Pro Thr Ala Leu Ala Ser Arg Asp Gly Ser Leu
 85 90 95
 Ala Asn Asn Pro Tyr Pro Gly Asp Val Thr Lys Phe Gly Arg Gly Asp
 100 105 110
 Ser Ala Ser Pro Ala Pro Ala Thr Thr Pro Ala Gln Pro Gln Gln Ser
 115 120 125
 Gln Ser Gln Thr His His Thr Ala Gln Gln Pro Phe Val Asn Pro Ala
 130 135 140
 Leu Pro Pro Gly Tyr Ser Tyr Thr Gly Leu Pro Tyr Tyr Thr Gly Met
 145 150 155 160
 Pro Ser Ala Phe Gln Tyr Gly Pro Thr Met Phe Val Pro Pro Ala Ser
 165 170 175
 Ala Lys Gln His Gly Val Asn Leu Ser Thr Pro Thr Pro Pro Phe Gln
 180 185 190
 Gln Ala Ser Gly Tyr Gly Gln His Gly Tyr Ser Thr Gly Tyr Asp Asp

195	200	205
Leu Thr Gln Gly Thr Ala Ala Gly Asp Tyr Ser Lys Gly Gly Tyr Ala		
210	215	220
Gly Ser Ser Gln Ala Pro Asn Lys Ser Ala Gly Ser Gly Pro Gly Lys		
225	230	235
Gly Val Ser Val Ser Ser Ser Thr Thr Gly Leu Pro Asp Met Thr Gly		
245	250	255
Ser Val Tyr Asn Lys Thr Gln Thr Phe Asp Lys Gln Gly Phe His Ala		
260	265	270
Gly Thr Pro Pro Pro Phe Ser Leu Pro Ser Val Leu Gly Ser Thr Gly		
275	280	285
Pro Leu Ala Ser Gly Ala Ala Pro Gly Tyr Ala Pro Pro Pro Phe Leu		
290	295	300
His Ile Leu Pro Ala His Gln Gln Pro His Ser Gln Leu Leu His His		
305	310	315
His Leu Pro Gln Asp Ala Gln Ser Gly Ser Gly Gln Arg Ser Gln Pro		
325	330	335
Ser Ser Leu Gln Pro Lys Ser Gln Ala Ser Lys Pro Ala Tyr Gly Asn		
340	345	350
Ser Pro Tyr Trp Thr Asn		
355		

<210> 3821

<211> 1255

<212> PRT

<213> Homo sapiens

<400> 3821

Met Gly Pro Lys His Val Leu Arg Gln Pro Gly Pro Ser Glu Arg His
1 5 10 15
His Pro Glu Val Pro Ala Trp Thr Pro Arg Ala Gly Pro Pro Cys Trp
20 25 30
Leu Cys Arg Gln Arg Trp Gly Trp Thr Leu His Pro Pro Gly Arg Gly
35 40 45
Cys Pro Ala Leu Leu Leu Ser Glu Pro Arg Met Ala Ala Gln Val Thr

50	55	60
Leu Glu Asp Ala Leu Ser Asn Val Asp Leu Leu Glu Glu Leu Pro Leu		
65	70	75
Pro Asp Gln Gln Pro Cys Ile Glu Pro Pro Pro Ser Ser Leu Leu Tyr		
85	90	95
Gln Asn Glu Met Leu Glu Glu Gly Gln Glu Tyr Ala Val Met Leu Tyr		
100	105	110
Thr Trp Arg Ser Cys Ser Arg Ala Ile Pro Gln Val Arg Cys Asn Glu		
115	120	125
Gln Pro Asn Arg Val Glu Ile Tyr Glu Lys Thr Val Glu Val Leu Glu		
130	135	140
Pro Glu Val Thr Lys Leu Met Asn Phe Met Tyr Phe Gln Arg Asn Ala		
145	150	155
Ile Glu Arg Phe Cys Gly Glu Val Arg Arg Leu Cys His Ala Glu Arg		
165	170	175
Arg Lys Asp Phe Val Ser Glu Ala Tyr Leu Ile Thr Leu Gly Lys Phe		
180	185	190
Ile Asn Met Phe Ala Val Leu Asp Glu Leu Lys Asn Met Lys Cys Ser		
195	200	205
Val Lys Asn Asp His Ser Ala Tyr Lys Arg Ala Ala Gln Phe Leu Arg		
210	215	220
Lys Met Ala Asp Pro Gln Ser Ile Gln Glu Ser Gln Asn Leu Ser Met		
225	230	235
Phe Leu Ala Asn His Asn Lys Ile Thr Gln Ser Leu Gln Gln Gln Leu		
245	250	255
Glu Val Ile Ser Gly Tyr Glu Glu Leu Leu Ala Asp Ile Val Asn Leu		
260	265	270
Cys Val Asp Tyr Tyr Glu Asn Arg Met Tyr Leu Thr Pro Ser Glu Lys		
275	280	285
His Met Leu Leu Lys Val Met Gly Phe Gly Leu Tyr Leu Met Asp Gly		
290	295	300
Ser Val Ser Asn Ile Tyr Lys Leu Asp Ala Lys Lys Arg Ile Asn Leu		
305	310	315
Ser Lys Ile Asp Lys Tyr Phe Lys Gln Leu Gln Val Val Pro Leu Phe		
325	330	335
Gly Asp Met Gln Ile Glu Leu Ala Arg Tyr Ile Lys Thr Ser Ala His		

340	345	350
Tyr Glu Glu Asn Lys Ser Arg Trp Thr Cys Thr Ser Ser Gly Ser Ser		
355	360	365
Pro Gln Tyr Asn Ile Cys Glu Gln Met Ile Gln Ile Arg Glu Asp His		
370	375	380
Met Arg Phe Ile Ser Glu Leu Ala Arg Tyr Ser Asn Ser Glu Val Val		
385	390	395
Thr Gly Ser Gly Arg Gln Glu Ala Gln Lys Thr Asp Ala Glu Tyr Arg		
405	410	415
Lys Leu Phe Asp Leu Ala Leu Gln Gly Leu Gln Leu Leu Ser Gln Trp		
420	425	430
Ser Ala His Val Met Glu Val Tyr Ser Trp Lys Leu Val His Pro Thr		
435	440	445
Asp Lys Tyr Ser Asn Lys Asp Cys Pro Asp Ser Ala Glu Glu Tyr Glu		
450	455	460
Arg Ala Thr Arg Tyr Asn Tyr Thr Ser Glu Glu Lys Phe Ala Leu Val		
465	470	475
Glu Val Ile Ala Met Ile Lys Gly Leu Gln Val Leu Met Gly Arg Met		
485	490	495
Glu Ser Val Phe Asn His Ala Ile Arg His Thr Val Tyr Ala Ala Leu		
500	505	510
Gln Asp Phe Ser Gln Val Thr Leu Arg Glu Pro Leu Arg Gln Ala Ile		
515	520	525
Lys Lys Lys Lys Asn Val Ile Gln Ser Val Leu Gln Ala Ile Arg Lys		
530	535	540
Thr Val Cys Asp Trp Glu Thr Gly His Glu Pro Phe Asn Asp Pro Ala		
545	550	555
Leu Arg Gly Glu Lys Asp Pro Lys Ser Gly Phe Asp Ile Lys Val Pro		
565	570	575
Arg Arg Ala Val Gly Pro Ser Ser Thr Gln Leu Tyr Met Val Arg Thr		
580	585	590
Met Leu Glu Ser Leu Ile Ala Asp Lys Ser Gly Ser Lys Lys Thr Leu		
595	600	605
Arg Ser Ser Leu Glu Gly Pro Thr Ile Leu Asp Ile Glu Lys Phe His		
610	615	620
Arg Glu Ser Phe Phe Tyr Thr His Leu Ile Asn Phe Ser Glu Thr Leu		

625	630	635	640
Gln Gln Cys Cys Asp Leu Ser Gln Leu Trp Phe Arg Glu Phe Phe Leu			
645	650	655	
Glu Leu Thr Met Gly Arg Arg Ile Gln Phe Pro Ile Glu Met Ser Met			
660	665	670	
Pro Trp Ile Leu Thr Asp His Ile Leu Glu Thr Lys Glu Ala Ser Met			
675	680	685	
Met Glu Tyr Val Leu Tyr Ser Leu Asp Leu Tyr Asn Asp Ser Ala His			
690	695	700	
Tyr Ala Leu Thr Arg Phe Asn Lys Gln Phe Leu Tyr Asp Glu Ile Glu			
705	710	715	720
Ala Glu Val Asn Leu Cys Phe Asp Gln Phe Val Tyr Lys Leu Ala Asp			
725	730	735	
Gln Ile Phe Ala Tyr Tyr Lys Val Met Ala Gly Ser Leu Leu Leu Asp			
740	745	750	
Lys Arg Leu Arg Ser Glu Cys Lys Asn Gln Gly Ala Thr Ile His Leu			
755	760	765	
Pro Pro Ser Asn Arg Tyr Glu Thr Leu Leu Lys Gln Arg His Val Gln			
770	775	780	
Leu Leu Gly Arg Ser Ile Asp Leu Asn Arg Leu Ile Thr Gln Arg Val			
785	790	795	800
Ser Ala Ala Met Tyr Lys Ser Leu Glu Leu Ala Ile Gly Arg Phe Glu			
805	810	815	
Ser Glu Asp Leu Thr Ser Ile Val Glu Leu Asp Gly Leu Leu Glu Ile			
820	825	830	
Asn Arg Met Thr His Lys Leu Leu Ser Arg Tyr Leu Thr Leu Asp Gly			
835	840	845	
Phe Asp Ala Met Phe Arg Glu Ala Asn His Asn Val Ser Ala Pro Tyr			
850	855	860	
Gly Arg Ile Thr Leu His Val Phe Trp Glu Leu Asn Tyr Asp Phe Leu			
865	870	875	880
Pro Asn Tyr Cys Tyr Asn Gly Ser Thr Asn Arg Phe Val Arg Thr Val			
885	890	895	
Leu Pro Phe Ser Gln Glu Phe Gln Arg Asp Lys Gln Pro Asn Ala Gln			
900	905	910	

Pro Gln Tyr Leu His Gly Ser Lys Ala Leu Asn Leu Ala Tyr Ser Ser
 915 920 925
 Ile Tyr Gly Ser Tyr Arg Asn Phe Val Gly Pro Pro His Phe Gln Val
 930 935 940
 Ile Cys Arg Leu Leu Gly Tyr Gln Gly Ile Ala Val Val Met Glu Glu
 945 950 955 960
 Leu Leu Lys Val Val Lys Ser Leu Leu Gln Gly Thr Ile Leu Gln Tyr
 965 970 975
 Val Lys Thr Leu Met Glu Val Met Pro Lys Ile Cys Arg Leu Pro Arg
 980 985 990
 His Glu Tyr Gly Ser Pro Gly Ile Leu Glu Phe Phe His His Gln Leu
 995 1000 1005
 Lys Asp Ile Val Glu Tyr Ala Glu Leu Lys Thr Val Arg Phe Gln Asn
 1010 1015 1020
 Leu His Ala Ala Pro Phe Gln Asn Ile Leu Pro Arg Val His Val Lys
 1025 1030 1035 1040
 Glu Gly Glu Arg Leu Asp Ala Lys Met Lys Arg Leu Glu Ser Lys Tyr
 1045 1050 1055
 Ala Pro Leu His Leu Val Pro Leu Ile Glu Arg Leu Gly Thr Pro Gln
 1060 1065 1070
 Gln Ile Ala Ile Ala Arg Glu Gly Asp Leu Leu Thr Lys Glu Arg Leu
 1075 1080 1085
 Cys Cys Gly Leu Ser Met Phe Glu Val Ile Leu Thr Arg Ile Arg Ser
 1090 1095 1100
 Phe Leu Asp Asp Pro Ile Trp Arg Gly Pro Leu Pro Ser Asn Gly Val
 1105 1110 1115 1120
 Met His Val Asp Glu Cys Val Glu Phe His Arg Leu Trp Ser Ala Met
 1125 1130 1135
 Gln Phe Val Tyr Cys Ile Pro Val Gly Thr His Glu Phe Thr Val Glu
 1140 1145 1150
 Gln Cys Phe Gly Asp Gly Leu His Trp Ala Gly Cys Met Ile Ile Val
 1155 1160 1165
 Leu Leu Gly Gln Gln Arg Arg Phe Ala Val Leu Asp Phe Cys Tyr His
 1170 1175 1180
 Leu Leu Lys Val Gln Lys His Asp Gly Lys Asp Glu Ile Ile Lys Asn
 1185 1190 1195 1200

Val Pro Leu Lys Lys Met Val Glu Arg Ile Arg Lys Phe Gln Ile Leu
 1205 1210 1215
 Asn Asp Glu Ile Ile Thr Ile Leu Asp Lys Tyr Leu Lys Ser Gly Asp
 1220 1225 1230
 Gly Glu Gly Thr Pro Val Glu His Val Arg Cys Phe Gln Pro Pro Ile
 1235 1240 1245
 His Gln Ser Leu Ala Ser Ser
 1250 1255

<210> 3822

<211> 166

<212> PRT

<213> Homo sapiens

<400> 3822

Met Gly Pro Leu Trp Tyr Thr Gln Ser Ile Thr Asp Arg Asn Met Thr
 1 5 10 15
 Glu Met Phe Pro Lys His Thr Gly Cys Ser Val Gly Ser Ala Ala Ala
 20 25 30
 Pro Ala Thr Leu Glu Thr Leu Val Ala Leu Gly Thr Thr Arg Ser His
 35 40 45
 Ala Arg Pro Pro Leu Cys Gln Glu Ser Gln His Thr Glu Glu Leu Ala
 50 55 60
 Ile Arg His Gln His Gln Ala Pro Ala Leu His Val Gly Leu Ser Asp
 65 70 75 80
 Pro Asp Val Thr Glu Asn Pro Ser Asp Pro Ala Ser Gly Ala Ala Cys
 85 90 95
 Thr Cys Phe Leu His Asn Ser Pro Gln Ala Ala Leu Pro Gly Ala Gly
 100 105 110
 Lys His Cys Pro Ser Gly Val Ala Asn Ser Arg Leu Cys Leu Ser Gln
 115 120 125
 Asn His Tyr Ser Asp His Pro Asp Ala Asn Pro Arg Tyr Ile Ile His
 130 135 140
 Leu Ser Asp Pro Phe Cys Leu His Leu Trp Ser Thr Ala His Gln Val
 145 150 155 160

Glu Ser Ser Glu Met Thr

165

<210> 3823

<211> 679

<212> PRT

<213> Homo sapiens

<400> 3823

Met	Leu	Ser	Met	Glu	Asn	Val	Gly	Asn	Tyr	Gln	Gly	Tyr	Ser	Gln	Glu
1				5					10					15	
Thr	Ala	Pro	Lys	Asp	His	Leu	Leu	His	Asp	Pro	Glu	Thr	Ser	Ser	Asp
			20					25					30		
Glu	Asp	Leu	Arg	Ser	Asn	Ser	Glu	Arg	Asp	Leu	Glu	Thr	His	Met	Met
	35						40					45			
His	Leu	Ser	Gly	Asn	Asp	Ser	Gly	Val	Arg	Leu	Gly	Gln	Lys	Gln	Leu
	50					55					60				
Glu	Asn	Ala	Leu	Thr	Val	Arg	Leu	Ser	Lys	Lys	Phe	Glu	Lys	Ile	Asn
	65				70				75					80	
Glu	Gly	Arg	Met	Pro	Gly	Thr	Val	His	Ser	Ser	Trp	His	Ser	Val	Lys
			85					90					95		
Gln	Thr	Met	Ser	Leu	Pro	Glu	Lys	Ser	Gln	Ser	Gln	Ile	Lys	His	Gln
		100						105					110		
Asn	Leu	Val	Ala	Leu	Val	Ser	Glu	Asp	His	Cys	Val	Asp	Thr	Ser	Gln
		115					120					125			
Glu	Ile	Ser	Phe	Leu	Gly	Ser	Asn	Lys	Gln	Lys	Met	Leu	Glu	Ala	His
	130					135					140				
Ile	Lys	Thr	Phe	Arg	Met	Arg	Met	Leu	Trp	Gly	Leu	Pro	Cys	Lys	Val
	145				150				155					160	
Leu	Glu	Ser	Ile	Glu	Ile	Phe	Lys	Ser	Glu	Glu	Asp	Ile	Ser	Asn	Ser
			165					170					175		
Phe	Ser	His	Phe	Tyr	Leu	Pro	Ser	Ser	Ala	Ser	Phe	Ile	Ser	Gln	Gly
		180						185					190		
Asp	Ser	Lys	Asp	Gly	Val	Ser	Lys	Ser	Cys	Arg	Arg	Ser	Thr	Phe	Gln
		195					200						205		

Gly Glu Lys Leu Gly Thr Thr Ser Ser Val Pro Val Leu Asn His Pro
 210 215 220
 Gln Pro Val Ser Ser Pro Ile Gly Lys Glu Gly Gln Gly Thr Leu Arg
 225 230 235 240
 Arg Gln Phe Ser Asp Ile Asp His Asp Leu Ile Glu Thr Asp Ala Lys
 245 250 255
 Asp Gly Ala Ser Thr Pro Leu Arg Arg Gly Thr Thr Tyr Phe Gln Gly
 260 265 270
 Glu Lys Leu Glu Thr Thr Ser Ser Phe Ser Ile Leu Gly His Pro His
 275 280 285
 Leu Val Thr Ser Pro Val Asp Gln Glu Lys Gln Gly Thr Leu Arg Arg
 290 295 300
 Glu Phe Ala Asp Thr Asp Glu Asp Leu Thr Glu Ser Val Trp Thr Thr
 305 310 315 320
 Glu Asp Gly Arg Gln Thr Phe Leu Pro Pro Thr Tyr Ser Ile Ile Asp
 325 330 335
 Glu Val Ser Gln Lys Gln Thr Ile Leu Ala Ser Arg Cys Ser Ala Glu
 340 345 350
 Leu Pro Ile Leu Gln Ala Gly Val Gly Arg Asp Ser Arg Asp Lys Arg
 355 360 365
 Glu Ser Ala Ser Asn Asn Val Asn Arg Leu Gln Gly Ser Gly Lys Thr
 370 375 380
 Phe Pro Val Thr Asn Gly Ser Lys Glu Met Phe Lys Glu Glu Glu Ile
 385 390 395 400
 Cys Thr Leu Gln Ser Gln Thr Arg Asn Asn Leu Thr Thr Ser Lys Ser
 405 410 415
 Gly Ser Cys Leu Val Thr Asn Val Lys Arg Ser Thr Ser His Glu Thr
 420 425 430
 Glu Ile Phe Pro Pro Arg Ile Ser Val Pro Gln Thr Pro Lys Ser Ser
 435 440 445
 Tyr Leu Lys Asn Gln Met Leu Ser Gln Leu Lys Leu Val Gln Arg Lys
 450 455 460
 His Ser Gln Pro Gln Ser His Phe Thr Gly Met Ser Leu Ala Leu Asp
 465 470 475 480
 Asn Leu Ser Ser Lys Asp Leu Leu Thr His Ala Gln Gly Ile Ser Asn
 485 490 495

Gln Asp Leu Gly Thr Ser Gln Val Leu His Val His Leu Glu Val Arg
 500 505 510
 Gly Ile Arg Val Ala Gln Gln Gln Glu His Arg Val Pro Thr His Val
 515 520 525
 Leu Gln Lys Cys Gln Val Lys Asn Phe Ser Pro Ala Ala Lys Arg Val
 530 535 540
 Ser Pro Leu Arg Pro Asn Gly Gly Glu Leu Gly Gly Gly Asp Ala Gly
 545 550 555 560
 Leu Gly Thr Ser Gln Leu Thr Arg Lys Ser Leu Pro Val His Asn Lys
 565 570 575
 Ala Ser Gly Glu Val Pro Gly Ser Lys Ser Ser Pro Thr Leu Lys Thr
 580 585 590
 Gln Pro Pro Ser Glu Asn Leu Phe Arg Lys Trp Met Gln Thr Leu Leu
 595 600 605
 Gln Trp Phe Asn Lys Pro Ser Ile Met Cys Glu Glu Gln Glu Ser Ser
 610 615 620
 Trp Glu Lys Gly Ser Ser Leu Ser Ser Ser Val Gln Asn Arg Ser Arg
 625 630 635 640
 Val Thr Ser Arg Ala Ala Phe Thr Gly Ala Thr Glu Ala Gln Lys Ile
 645 650 655
 Arg Lys Asp Thr Gly Glu Phe Leu Glu Glu Lys Leu Gly His Ser His
 660 665 670
 Gly Ile Asp Ile Thr Cys Pro
 675

<210> 3824

<211> 163

<212> PRT

<213> Homo sapiens

<400> 3824

Met Thr Thr Lys Thr Met Ser Gln Tyr Cys Gln Gln Leu Asn Gly Leu
 1 5 10 15
 Lys Ala Glu Asn Thr Arg Leu Asn Ser Lys Leu Glu Lys Glu Glu His
 20 25 30

His Thr Asp Gly Leu Glu Ala Glu Val Glu Phe Phe His Ser Arg Leu
 35 40 45
 Ala Ala Ala Ile Asn Glu His Asn Glu Ser Leu Glu Thr Lys Asp Leu
 50 55 60
 Glu Leu Val Leu Gln Arg Ala His Asn Phe Ser Val His Lys Lys Ile
 65 70 75 80
 Ser Ser Thr Val Ser Gln Leu Lys Asp Lys Asn Glu Leu Leu Thr Glu
 85 90 95
 Gln Phe Ser Lys Ala Gln Met Lys Phe Asn Thr Leu Lys Gly Lys Leu
 100 105 110
 His Glu Ile Arg Asp Ala Leu Arg Glu Lys Thr Leu Ala Leu Glu Ser
 115 120 125
 Val Gln Met Asp Gln Arg Gln Ala Gln His Arg Ile Lys Glu Met Glu
 130 135 140
 Gln Ile His Pro Asn Glu Glu Thr Lys Gly Val Asp Pro Pro Glu Ser
 145 150 155 160
 Thr Thr Val

<210> 3825

<211> 152

<212> PRT

<213> Homo sapiens

<400> 3825

Met Gln Ala Pro Phe Gly Ala Arg Asn Ala Arg Glu Ile Cys Leu Thr
 1 5 10 15
 Lys Arg Glu Pro Gly Gly Asn Ile Gln Asp Asn Gly Lys Lys Ala Ser
 20 25 30
 Lys Ile Phe Gln Lys Ser Leu Gly Gln Pro Phe Pro Ser Gln Ala Gln
 35 40 45
 Arg Pro Lys Ser Lys Glu Trp Phe Gln Gly Pro Gly Leu Glu His His
 50 55 60
 Cys Pro Val Gln Pro Trp Asp Ala Ala Pro Cys Ile Gln Thr Ala Thr
 65 70 75 80

Ala Pro Ala Leu Ala Gln Arg Ala Ser Asp Thr Ala Trp Ala Thr Ala
 85 90 95
 Ser Lys Gly Ala Ser Cys Lys Pro Trp Trp Phe Pro Cys Gly Val Lys
 100 105 110
 Pro Lys Gly Ala Gln Asn Glu Ser Met Lys Glu Ala Trp Gln Leu Pro
 115 120 125
 Pro Arg Phe Gln Arg Leu Tyr Arg Lys Thr Cys Leu Leu Arg Gln Lys
 130 135 140
 Pro Ala Ala Gly Val Val Pro Leu
 145 150

<210> 3826

<211> 118

<212> PRT

<213> Homo sapiens

<400> 3826

Met Asp Met Asp Phe Pro Asn Thr His Ala Gln Ser Gln Val Ser Pro
 1 5 10 15
 Arg Gln Pro Met Arg Met Ala Leu Gly Ser Leu Asp Phe Ser Ser Asp
 20 25 30
 Gly Arg Ala Leu Asn Pro Lys Val Leu Val Gly Gln Val Gly Gly Phe
 35 40 45
 Leu Val Arg Thr Arg Gly Gly Thr Ser Thr Gly Met Gly Asp Ala Gly
 50 55 60
 Ser Arg Cys Pro Ser Asp Ala Val Val Arg Thr Leu Leu Thr Gln Leu
 65 70 75 80
 Gln Arg Arg Ala Arg Gly Thr Leu Ala His Asp Ala Pro Val Met Pro
 85 90 95
 Trp Leu Gly Arg Arg Ser Arg Ser Cys Ser Ala Glu His Gly Gly Arg
 100 105 110
 Trp Leu Thr Met Pro Gln
 115

<210> 3827

<211> 151

<212> PRT

<213> Homo sapiens

<400> 3827

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Met Asp Gly Val Asp Ala Arg Val Ser Arg Arg Arg Gly Trp His Pro
  1             5             10             15
His Glu Ala Ser His Thr Pro Met Gly Val Gly Ile Trp Arg His Ala
      20             25             30
Trp Gly Gly Asp Ala Leu Trp Arg His Lys Ala Gly Ala Ser Arg Ala
      35             40             45
Pro Arg Ser Trp Thr Gly Pro Gln Gly Val Leu Gln Leu Lys Arg Glu
      50             55             60
Gly Lys Lys Ala His Glu Pro Val Ala Ser Gly Ala Asp Phe Pro Thr
      65             70             75             80
Gln Gly Leu Ser Leu Cys Pro Trp Gly Pro Arg Asn Phe Pro Gly Asn
      85             90             95
Leu His Leu Ala Gln Ile Tyr Pro Leu Ser Pro Pro Thr Leu Ala Val
      100            105            110
Ala Ser Gln Glu Ala Pro Ala Thr Val Leu Lys Thr Lys Phe Ser Ser
      115            120            125
Val Ile Pro Leu Cys Ser Ala Cys Val Ile His Glu Thr Gly Lys Ser
      130            135            140
Pro Gly Leu Gln Arg Lys Lys
145             150

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<210> 3828

<211> 131

<212> PRT

<213> Homo sapiens

<400> 3828

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Met Ala Thr Ala Ser Ala Phe Ser Val Arg Glu Pro Arg Ala Gln Pro
  1             5             10             15

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Asn Pro Ala Gly Gly Asn Ser Trp Val Pro Phe Pro Tyr Phe Arg Ser
 20 25 30
 Leu Gly Cys Ala Val Val Thr Ser Glu Pro Gly Cys Val Leu Thr Ser
 35 40 45
 Asp Lys Cys Leu Ser Leu Gly His Glu Arg Gly Val Gly Ser Ala Val
 50 55 60
 Gln Phe Gln Gly Gly Phe Trp Leu Ile Thr Phe Ser Trp Val Phe Ala
 65 70 75 80
 Glu Ser Gly Gly Asn Leu Cys Pro Pro Glu Thr Arg Asp Gln Gly Arg
 85 90 95
 Ser Tyr Gly Arg Gly Asp Ala Ala Arg Ala Val Ala Ser Ser Ala Ser
 100 105 110
 Ser Val Arg Val Arg Ser Arg Leu Ala Pro Gly Pro Pro Gly Ala Gln
 115 120 125
 Gly Leu Glu
 130

<210> 3829

<211> 232

<212> PRT

<213> Homo sapiens

<400> 3829

Met Ala Asn Tyr Tyr Glu Val Leu Gly Val Gln Ala Ser Ala Ser Pro
 1 5 10 15
 Glu Asp Ile Lys Lys Ala Tyr Arg Lys Leu Ala Leu Arg Trp His Pro
 20 25 30
 Asp Lys Asn Pro Asp Asn Lys Glu Glu Ala Glu Lys Lys Phe Lys Leu
 35 40 45
 Val Ser Glu Ala Tyr Glu Val Leu Ser Asp Ser Lys Lys Arg Ser Leu
 50 55 60
 Tyr Asp Arg Ala Gly Cys Asp Ser Trp Arg Ala Gly Gly Gly Ala Ser
 65 70 75 80
 Thr Pro Tyr His Ser Pro Phe Asp Thr Gly Tyr Thr Phe Arg Asn Pro
 85 90 95

Glu	Asp	Ile	Phe	Arg	Glu	Phe	Phe	Gly	Gly	Leu	Asp	Pro	Phe	Ser	Phe	
100				105				110								
Glu	Phe	Trp	Asp	Ser	Pro	Phe	Asn	Ser	Asp	Arg	Gly	Gly	Arg	Gly	His	
115				120				125								
Gly	Leu	Arg	Gly	Ala	Phe	Ser	Ala	Gly	Phe	Gly	Glu	Phe	Pro	Ala	Phe	
130				135				140								
Met	Glu	Ala	Phe	Ser	Ser	Phe	Asn	Met	Leu	Gly	Cys	Ser	Gly	Gly	Ser	
145				150				155				160				
His	Thr	Thr	Phe	Ser	Ser	Thr	Ser	Phe	Gly	Gly	Ser	Ser	Ser	Gly	Ser	
165				170				175								
Ser	Gly	Phe	Lys	Ser	Val	Met	Ser	Ser	Thr	Glu	Met	Ile	Asn	Gly	His	
180				185				190								
Lys	Val	Thr	Thr	Lys	Arg	Ile	Val	Glu	Asn	Gly	Gln	Glu	Arg	Val	Glu	
195				200				205								
Val	Glu	Glu	Asp	Gly	Gln	Leu	Lys	Ser	Val	Thr	Val	Asn	Gly	Lys	Glu	
210				215				220								
Gln	Leu	Lys	Trp	Met	Asp	Ser	Lys									
225				230												

<210> 3830

<211> 119

<212> PRT

⟨213⟩ Homo sapiens

<400> 3830

Met	Ser	Ile	His	Arg	Ile	Cys	Arg	His	Pro	Ser	Lys	Glu	Ser	Cys	Thr
1					5				10					15	
Ala	Tyr	Ser	Thr	Asp	Ile	Leu	Thr	Lys	Ala	Ser	Pro	Ser	Cys	Leu	Gly
				20				25					30		
Gly	Val	Gly	Leu	Phe	Pro	Tyr	Ile	Leu	Ser	Ser	Leu	Glu	Thr	Arg	Gln
			35					40				45			
Val	Asn	Gln	Leu	Gly	Val	Lys	Trp	Pro	Ser	Ala	Met	Ser	Ser	Pro	Gly
	50						55				60				
Glu	Ser	Ile	Pro	Leu	Leu	Pro	Leu	Phe	Pro	Cys	Asn	Trp	Asn	Trp	Thr
65					70					75					80

Thr Trp Cys Pro Arg Leu Ser Gly Val Lys Leu Pro Leu Gly Val Ser
 85 90 95
 Cys Ser Ser Val Thr Phe Ile Phe Ala Phe Leu Met Ser Pro Leu Ala
 100 105 110
 Val Leu Ile Leu Leu Leu Gln
 115

<210> 3831

<211> 254

<212> PRT

<213> Homo sapiens

<400> 3831

Met Gly Glu Asp Phe Met Thr Lys Thr Pro Lys Ala Met Ala Thr Lys
 1 5 10 15
 Ala Lys Ile Asp Lys Trp His Leu Ile Lys Leu Lys Ser Phe Cys Thr
 20 25 30
 Ala Lys Glu Thr Thr Ile Arg Met Asn Arg Gln Pro Thr Glu Trp Glu
 35 40 45
 Lys Ile Phe Ala Ile Tyr Pro Ser Asp Lys Gly Leu Ile Ser Arg Ile
 50 55 60
 Cys Lys Glu Leu Lys Gln Ile Tyr Lys Ile Lys Ser Asn Asn Ser Ile
 65 70 75 80
 Asn Lys Trp Ala Lys Asp Met Asn Arg His Phe Ser Lys Glu Asp Ile
 85 90 95
 Tyr Ala Ala Lys Arg His Met Lys Glu Cys Ser Ser Ser Leu Ala Ile
 100 105 110
 Arg Glu Met Gln Ile Lys Thr Thr Val Arg Tyr Tyr Leu Thr Pro Val
 115 120 125
 Arg Met Ala Ile Ile Lys Lys Ser Gly Asn Asn Arg Cys Trp Lys Gly
 130 135 140
 Tyr Gly Glu Ile Gly Thr Leu Leu His Cys Trp Trp Asp Cys Lys Leu
 145 150 155 160
 Val Gln Pro Leu Trp Lys Thr Val Trp Arg Phe Leu Lys Asp Leu Glu

	165		170		175										
Leu	Glu	Ile	Pro	Phe	Asp	Pro	Ala	Ile	Pro	Leu	Leu	Gly	Ile	Tyr	Pro
	180		185		190										
Lys	Asp	Tyr	Lys	Ser	Cys	Cys	Tyr	Lys	Asp	Thr	Cys	Thr	Arg	Lys	Phe
	195		200		205										
Ile	Leu	Ala	Leu	Leu	Thr	Ile	Ala	Lys	Thr	Trp	Asn	Gln	Pro	Lys	Cys
	210		215		220										
Pro	Ser	Met	Ile	Asp	Trp	Ile	Lys	Lys	Met	Trp	His	Met	Tyr	Thr	Ile
225			230		235										240
Glu	Tyr	Tyr	Ala	Ala	Ile	Lys	Arg	Met	Ser	Ser	Cys	Pro	Leu		
	245		250												

<210> 3832

<211> 1014

<212> PRT

<213> Homo sapiens

<400> 3832

Met	Pro	Asn	Pro	Pro	Leu	Tyr	Tyr	Gln	Pro	Gly	Asn	Asp	Gln	Pro	Val
1			5					10					15		
Ser	Phe	Asn	Leu	Lys	Asn	Thr	Ser	Gln	Val	Ser	Leu	His	Arg	Ser	Glu
		20						25					30		
Thr	Ile	Ser	Leu	Gln	Thr	Trp	Cys	Ser	Cys	Val	Ala	Gly	Gln	Pro	Ile
	35						40					45			
Gln	Thr	Phe	Trp	Val	Ser	Glu	Trp	Ser	Thr	Met	Asn	Pro	Glu	Gln	Arg
	50				55					60					
His	His	Cys	Gln	Gln	Thr	Pro	Asn	Pro	Met	Ala	Leu	Ala	Leu	Pro	Ser
65				70					75					80	
Pro	Ala	Leu	Lys	Ala	Leu	Ser	Gly	Pro	His	Pro	Gln	Ser	Gly	Gly	Gln
		85						90					95		
Asp	Asn	Asp	Ser	Gly	Ser	Asp	Leu	Gln	Gln	Lys	Tyr	Ser	Gln	Leu	Phe
	100						105					110			
Cys	Gly	Leu	Pro	Ser	Leu	His	Ser	Glu	Ser	Leu	Val	Ala	Thr	Phe	Met
	115						120					125			
Gly	Ser	Gln	Gly	Leu	Pro	Lys	Ile	Glu	Asn	Val	Pro	Lys	Pro	Pro	Leu

130	135	140	
Lys Asp Pro Phe Leu Phe Asn Glu Leu Ser Phe Pro Gln Leu Leu Pro			
145	150	155	160
Lys Thr Ser Pro Gln Ser Ala Pro Pro Ser Ser Pro Leu Ser Pro Asn			
	165	170	175
Trp Val Ser Pro Ser Asp His Gln Arg Ala Gln Ile Asn Val Pro Phe			
	180	185	190
Leu Thr Leu Ala Glu Tyr Glu Ala Leu Glu Trp His Leu Leu Gln Arg			
	195	200	205
Gln Leu Gln Leu Gln Trp Gly Trp Pro Ala Ala Leu Gln Arg Ser Gln			
	210	215	220
His Thr Gln Cys Leu Met Gln His Glu Pro Cys Gly Lys Ala Gln Ser			
225	230	235	240
Pro Glu Thr Thr Thr Ala Ser Gln Thr Gly Lys Ser Ile Ser Val Leu			
	245	250	255
Thr Arg Glu Leu Leu Phe Phe Pro Glu His Ala Arg Lys Leu Leu Glu			
	260	265	270
Phe His Ile Gln Lys Gln Ser Ile His His Arg Trp Gly Leu Pro Gln			
	275	280	285
Lys Ile Gln Gln Ser Ile Gln Leu Leu Leu Thr Ser Thr Asp Gln Gln			
	290	295	300
Thr Val Ser Ser Ser Ser Thr Ala Leu Ala Asn Val Ser Ile Pro Gln			
305	310	315	320
Pro Val Ala Leu Glu Ala Asn Gly Ala Cys Asp Val Leu Ser Pro Ile			
	325	330	335
Ala Ala Pro Val Ser Ile Pro Arg Pro His Leu Leu Thr Gln Val Lys			
	340	345	350
Ala Ile Leu Gln Ser His Ile Asp Ser Lys Cys Gly Gln Ile His Gln			
	355	360	365
Gly Lys Ile Pro Ala Cys Val His Arg Ser Trp Asp Cys Arg Ile Ser			
	370	375	380
Gly Val Leu Ala Val Ala Pro Phe Pro Cys Ile Pro Glu Ser Gln Phe			
385	390	395	400
Leu Glu Leu Gln Thr Ala Ser Asp Pro Asp Leu His His Lys Val Met			
	405	410	415
Pro Trp Met Pro Thr Ala Leu Asp Gln Gln Gln Gln Ala Leu Pro Gly			

420	425	430
Thr Val Thr Glu His Pro Lys Leu Leu Arg Val Leu Ser Val Glu Ala		
435	440	445
Ile Glu Lys Leu Glu Thr Thr Leu Arg His Lys His Leu Ala Phe Leu		
450	455	460
Ser Gly Leu Pro Ala Leu Tyr Tyr Val Ala Leu Pro Arg Ala Leu Ala		
465	470	475
Pro Ala Val Thr Ser Gln Ser Val Ile Thr Glu Met Val Pro Ser Pro		
485	490	495
Val Glu Ile Pro Ala Glu Pro Leu Ile Gln Met Val Ser Phe Glu Glu		
500	505	510
Gln Cys Ile Ser Leu Gly Pro Cys Pro Gln Gly Asn Asn Glu Ser Cys		
515	520	525
Thr Asp Val Ala Lys Glu Phe Gln Pro Ala Val Pro Val Lys Gly Thr		
530	535	540
Met Glu Thr Leu Pro Leu Glu Ser Gln Thr His Pro Thr Ser Pro His		
545	550	555
Ser Leu Gln Thr His Ile Leu Thr Lys Leu Asn Phe His Leu Arg Lys		
565	570	575
Lys Val Leu Glu Ile Gln Trp Gly Ile Pro Ile Arg Ala Arg Lys Ser		
580	585	590
Arg Glu Gln Thr Val Ala Ala Pro Glu Asn Ile Ser Thr Gln Lys Ser		
595	600	605
Leu Glu Ser Leu Asn His Gln Gly Glu Thr Leu Leu Gln Glu Leu Pro		
610	615	620
Ile Pro Pro Asp Thr Leu Pro Ala Pro Asn Pro Glu Gly Val His Leu		
625	630	635
Lys Glu Gln Leu Ala Asn Asp Leu Lys Ala Val Gln Gln Asn Gln Lys		
645	650	655
Gln Ser Asn Ser Lys Ala Val Pro Gln Gly Ser Ala His Ser Val Ser		
660	665	670
Lys Ile Ser Gln Pro Ile Gly Asp Met Thr Glu Ala His Met Pro Cys		
675	680	685
Val Gln Val Glu Ala Asn Val Asn Lys Pro Ser Leu Glu Glu Pro Cys		
690	695	700
Gly Pro Glu Pro Gln Ser Pro Ser Lys Ser Lys Asp Pro Ala His Val		

705	710	715	720
Pro Met Leu Ala Glu Asn Arg Glu Asp Pro Glu Glu Thr Lys Ala Ala			
725	730	735	
Arg Asp Tyr Arg Glu Gly Asp Ala Gly Phe Gly Arg Ser Ser Thr Arg			
740	745	750	
Glu Glu Arg Arg Pro Ala Glu Asp Gln Arg Pro Ala Gly Met Leu Pro			
755	760	765	
Asn Lys Thr Pro Arg Gly Ser Trp Arg Trp Ser His Ser Phe His Leu			
770	775	780	
Ala Asp Pro Cys Gln His Ser Pro Gln His His Pro Gln Leu Lys Leu			
785	790	795	800
Pro Gln Leu Pro Pro Arg Val Pro Gly Glu Lys Glu Ser Glu Lys Asp			
805	810	815	
Leu Gln Asp Ser Gln Thr Lys Leu Thr Val Ile Leu Glu Pro Ala Thr			
820	825	830	
Ile Pro Glu Asn Ala Gln Thr Val Leu Pro Gln Ser Ser Gln Gly Gln			
835	840	845	
Pro Phe Leu Ser Gln Pro Thr Gln Ala Lys Pro Leu Gln Gly Gln Thr			
850	855	860	
Leu Gln Gly Gln Val Leu His Gly Leu Val Met Pro Val His Ala Gln			
865	870	875	880
Lys Lys Pro Ser Leu Thr Glu Ser Ser Phe Arg Asn Lys Ile Lys Cys			
885	890	895	
Phe Leu Gln His Ile Asn Pro Lys Thr Lys Gly Lys Gly His Glu Asp			
900	905	910	
Ser Met Phe Ser Ala Ala Ala Lys Val Ala Lys Thr Arg Lys Glu Asn			
915	920	925	
Val Ala Lys Ser Leu Ala Pro Ala Lys Ser Pro Val Gly Arg Ser Lys			
930	935	940	
Thr Glu Lys Pro Thr Gly Cys Ser Lys Ala Gln Ser Arg Pro Ala Gln			
945	950	955	960
Lys Leu Val Gly Pro Ala Phe Leu Asp Gly Pro Gln Ser Leu Asp Asp			
965	970	975	
Lys Leu Arg Leu His Ser Arg Gln Pro Gly Ser Ala Ser Ala Leu Gly			
980	985	990	
Tyr Pro Arg His Cys Pro Arg His Cys Pro Arg Glu Ala Cys Ala Asn			

995
Lys Pro Gly His Pro Thr
1010

1000

1005

<210> 3833

<211> 161

<212> PRT

<213> Homo sapiens

<400> 3833

Met Ala Ala Trp Thr Ala Ser His Trp Pro Val Lys Gly Ile Leu Lys
1 5 10 15
Asn Lys Thr Ser Thr Ala Ser Ser Met Val Ala Ser Ala Glu Gln Pro
20 25 30
Ser Gly Ser Val Glu Glu Glu Leu Ser Lys Lys Ser Gln Lys Trp Glu
35 40 45
Glu Met Asn Ile Leu Ala Thr Tyr His Pro Ala Asp Lys Asp Tyr Gly
50 55 60
Leu Met Lys Ile Val Glu Pro Ser Thr Pro Ser Cys Arg Lys Met Gly
65 70 75 80
Asp Gly Glu Asp Ala Cys Ser Gly Ile Glu Thr Thr Glu Ala Val Ala
85 90 95
Pro Asp Ile Leu Ala Lys Lys Leu Ala Val Ala Glu Gly Ser Asn Pro
100 105 110
Lys Tyr Arg Val Gln Glu Gln Glu Ser Ser Gly Glu Glu Ala Ser Asp
115 120 125
Leu Ser Pro Glu Glu Arg Glu Lys Arg Arg Gln Phe Gln Met Lys Arg
130 135 140
Lys Leu His Tyr Asn Glu Gly Leu Asn Ile Lys Leu Ala Arg Glu Leu
145 150 155 160
Ile

<210> 3834

<211> 275

<212> PRT

<213> Homo sapiens

<400> 3834

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Met Leu Val Ala Gln Gln Ala Tyr Ser Thr Leu Val Pro Met Pro Leu
  1             5             10             15
Leu Val Ser Ser Ile Ser Glu Ile Gln Asn Gln Val Leu Glu Glu Ile
      20             25             30
Gln Asn Leu Asn Cys Val Lys Glu Asn Ser Ala Thr Phe Ile Glu Arg
      35             40             45
Lys Leu Ser Phe Glu Lys Lys Lys Pro Val Gln Ile Leu Pro Glu Met
      50             55             60
Pro His Gln Thr Asp Ile His Arg Ser Lys Leu Leu Ser Thr Tyr Ser
      65             70             75             80
Ala Glu Glu Leu Tyr Gln Ala Lys Arg Lys Cys Asn Ala Thr Gln Glu
      85             90             95
Tyr Asp Ile Asn Leu Leu Glu Gly Asp Leu Val Ala Val Ile Glu Gln
      100            105            110
Lys Asp Pro Leu Gly Ser Thr Ser Arg Trp Leu Val Asp Thr Gly Asn
      115            120            125
Val Lys Gly Tyr Val Tyr Ser Ser Phe Leu Lys Pro Tyr Asn Pro Ala
      130            135            140
Lys Met Gln Lys Val Asp Ala Glu Asn Arg Phe Cys Asp Asp Asp Phe
      145            150            155            160
Glu Asn Ile Ser Leu Phe Val Ser Ser Arg Pro Ala Ser Asp Ser Val
      165            170            175
Thr Gly Thr Ser Glu Ser Ser Ile Gly Asp Ser Ser Ser Ser Leu Ser
      180            185            190
Gly Thr Cys Gly Lys Phe Glu Thr Asn Gly Thr Asp Val Asp Ser Phe
      195            200            205
Gln Glu Val Asp Glu Gln Ile Phe Tyr Ala Val His Ala Phe Gln Ala
      210            215            220
Arg Ser Asp His Glu Leu Ser Leu Gln Glu Tyr Gln Arg Val His Ile
      225            230            235            240
Leu Arg Phe Cys Asp Leu Ser Gly Asn Lys Glu Trp Trp Leu Ala Glu

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245 250 255
 Ala Gln Gly Gln Lys Gly Tyr Val Pro Ala Asn Tyr Leu Gly Lys Met
 260 265 270
 Thr Tyr Ala
 275

<210> 3835

<211> 1551

<212> PRT

<213> Homo sapiens

<400> 3835

Met Ser Pro Ile Gly Asp Ala Phe Arg Asn Arg Leu Arg Met Phe Pro
 1 5 10 15
 Ser Leu Ile Asn Cys Cys Thr Ile Asp Trp Phe Gln Ser Trp Pro Thr
 20 25 30
 Asp Ala Leu Glu Leu Val Ala Asn Lys Phe Leu Glu Asp Val Glu Leu
 35 40 45
 Asp Asp Asn Ile Arg Val Glu Val Val Ser Met Cys Lys Tyr Phe Gln
 50 55 60
 Glu Ser Val Lys Lys Leu Ser Leu Asp Tyr Tyr Asn Lys Leu Arg Arg
 65 70 75 80
 His Asn Tyr Val Thr Pro Thr Ser Tyr Leu Glu Leu Ile Leu Thr Phe
 85 90 95
 Lys Thr Leu Leu Asn Ser Lys Arg Gln Glu Val Ala Met Met Arg Asp
 100 105 110
 Arg Tyr Leu Thr Gly Leu Gln Lys Leu Asp Phe Ala Ala Ser Gln Val
 115 120 125
 Ala Val Met Gln Arg Glu Leu Thr Ala Leu Gln Pro Gln Leu Ile Leu
 130 135 140
 Thr Ser Glu Glu Thr Ala Lys Met Met Val Lys Ile Glu Ala Glu Thr
 145 150 155 160
 Arg Glu Ala Asp Gly Lys Lys Leu Leu Val Gln Ala Asp Glu Lys Glu
 165 170 175
 Ala Asn Val Ala Ala Ala Ile Ala Gln Gly Ile Lys Asn Glu Cys Glu

180	185	190
Gly Asp Leu Ala Glu Ala Met Pro Ala Leu Glu Ala Ala Leu Ala Ala		
195	200	205
Leu Asp Thr Leu Asn Pro Ala Asp Ile Ser Leu Val Lys Ser Met Gln		
210	215	220
Asn Pro Pro Gly Pro Val Lys Leu Val Met Glu Ser Ile Cys Ile Met		
225	230	235
Lys Gly Met Lys Pro Glu Arg Lys Pro Asp Pro Ser Gly Ser Gly Lys		
245	250	255
Met Ile Glu Asp Tyr Trp Gly Val Ser Lys Lys Ile Leu Gly Asp Leu		
260	265	270
Lys Phe Leu Glu Ser Leu Lys Thr Tyr Asp Lys Asp Asn Ile Pro Pro		
275	280	285
Leu Thr Met Lys Arg Ile Arg Glu Arg Phe Ile Asn His Pro Glu Phe		
290	295	300
Gln Pro Ala Val Ile Lys Asn Val Ser Ser Ala Cys Glu Gly Leu Cys		
305	310	315
Lys Trp Val Arg Ala Met Glu Val Tyr Asp Arg Val Ala Lys Val Val		
325	330	335
Ala Pro Lys Arg Glu Arg Leu Arg Glu Ala Glu Gly Lys Leu Ala Ala		
340	345	350
Gln Met Gln Lys Leu Asn Gln Lys Arg Ala Glu Leu Lys Leu Val Val		
355	360	365
Asp Arg Leu Gln Ala Leu Asn Asp Asp Phe Glu Glu Met Asn Thr Lys		
370	375	380
Lys Lys Asp Leu Glu Glu Asn Ile Glu Ile Cys Ser Gln Lys Leu Val		
385	390	395
Arg Ala Glu Lys Leu Ile Ser Gly Leu Gly Gly Glu Lys Asp Arg Trp		
405	410	415
Thr Glu Ala Ala Arg Gln Leu Gly Ile Arg Tyr Thr Asn Leu Thr Gly		
420	425	430
Asp Val Leu Leu Ser Ser Gly Thr Val Ala Tyr Leu Gly Ala Phe Thr		
435	440	445
Val Asp Tyr Arg Val Gln Cys Gln Asn Gln Trp Leu Ala Glu Cys Lys		
450	455	460
Asp Lys Val Ile Pro Gly Phe Ser Asp Phe Ser Leu Ser His Thr Leu		

465	470	475	480
Gly Asp Pro Ile Lys Ile Arg Ala Trp Gln Ile Ala Gly Leu Pro Val			
	485	490	495
Asp Ser Phe Ser Ile Asp Asn Gly Ile Ile Val Ser Asn Ser Arg Arg			
	500	505	510
Trp Ala Leu Met Ile Asp Pro His Gly Gln Ala Asn Lys Trp Ile Lys			
	515	520	525
Asn Met Glu Lys Ala Asn Lys Leu Ala Val Ile Lys Phe Ser Asp Ser			
	530	535	540
Asn Tyr Met Arg Met Leu Glu Asn Ala Leu Gln Leu Gly Thr Pro Val			
545	550	555	560
Leu Ile Glu Asn Ile Gly Glu Glu Leu Asp Ala Ser Ile Glu Pro Ile			
	565	570	575
Leu Leu Lys Ala Thr Phe Lys Gln Gln Gly Val Glu Tyr Met Arg Leu			
	580	585	590
Gly Glu Asn Ile Ile Glu Tyr Ser Arg Asp Phe Lys Leu Tyr Ile Thr			
	595	600	605
Thr Arg Leu Arg Asn Pro His Tyr Leu Pro Glu Val Ala Val Lys Val			
	610	615	620
Cys Leu Leu Asn Phe Met Ile Thr Pro Leu Gly Leu Gln Asp Gln Leu			
625	630	635	640
Leu Gly Ile Val Ala Ala Lys Glu Lys Pro Glu Leu Glu Glu Lys Lys			
	645	650	655
Asn Gln Leu Ile Val Glu Ser Ala Lys Asn Lys Lys His Leu Lys Glu			
	660	665	670
Ile Glu Asp Lys Ile Leu Glu Val Leu Ser Met Ser Lys Gly Asn Ile			
	675	680	685
Leu Glu Asp Glu Thr Ala Ile Lys Val Leu Ser Ser Ser Lys Val Leu			
	690	695	700
Ser Glu Glu Ile Ser Glu Lys Gln Lys Val Ala Ser Met Thr Glu Thr			
705	710	715	720
Gln Ile Asp Glu Thr Arg Met Gly Tyr Lys Pro Val Ala Val His Ser			
	725	730	735
Ala Thr Ile Phe Phe Cys Ile Ser Asp Leu Ala Asn Ile Glu Pro Met			
	740	745	750
Tyr Gln Tyr Ser Leu Thr Trp Phe Ile Asn Leu Tyr Met His Ser Leu			

755	760	765
Thr His Ser Thr Lys Ser Glu Glu Leu Asn Leu Arg Ile Lys Tyr Ile		
770	775	780
Ile Asp His Phe Thr Leu Ser Ile Tyr Asn Asn Val Cys Arg Ser Leu		
785	790	795
Phe Glu Lys Asp Lys Leu Leu Phe Ser Leu Leu Leu Thr Ile Gly Ile		
805	810	815
Met Lys Gln Lys Lys Glu Ile Thr Glu Glu Val Trp Tyr Phe Leu Leu		
820	825	830
Thr Gly Gly Ile Ala Leu Asp Asn Pro Tyr Pro Asn Pro Ala Pro Gln		
835	840	845
Trp Leu Ser Glu Lys Ala Trp Ala Glu Ile Val Arg Ala Ser Ala Leu		
850	855	860
Pro Lys Leu His Gly Leu Met Glu His Leu Glu Gln Asn Leu Gly Glu		
865	870	875
Trp Lys Leu Ile Tyr Asp Ser Ala Trp Pro His Glu Glu Gln Leu Pro		
885	890	895
Gly Ser Trp Lys Phe Ser Gln Gly Leu Glu Lys Met Val Ile Leu Arg		
900	905	910
Cys Leu Arg Pro Asp Lys Met Val Pro Ala Val Arg Glu Phe Ile Ala		
915	920	925
Glu His Met Gly Lys Leu Tyr Ile Glu Ala Pro Thr Phe Asp Leu Gln		
930	935	940
Gly Ser Tyr Asn Asp Ser Ser Cys Cys Ala Pro Leu Ile Phe Val Leu		
945	950	955
Ser Pro Ser Ala Asp Pro Met Ala Gly Leu Leu Lys Phe Ala Asp Asp		
965	970	975
Leu Gly Met Gly Gly Thr Arg Thr Gln Thr Ile Phe Leu Gly Gln Gly		
980	985	990
Gln Gly Pro Ile Ala Ala Lys Met Ile Asn Asn Ala Ile Lys Asp Gly		
995	1000	1005
Thr Trp Val Val Leu Gln Asn Cys His Leu Ala Ala Ser Trp Met Pro		
1010	1015	1020
Thr Leu Glu Lys Ile Cys Glu Glu Val Ile Val Pro Glu Ser Thr Asn		
1025	1030	1035
Ala Arg Phe Arg Leu Trp Leu Thr Ser Tyr Pro Ser Glu Lys Phe Pro		

1045	1050	1055
Val Ser Ile Leu Gln Asn Gly Ile Lys Met Thr Asn Glu Pro Pro Lys		
1060	1065	1070
Gly Leu Arg Ala Asn Leu Leu Arg Ser Tyr Leu Asn Asp Pro Ile Ser		
1075	1080	1085
Asp Pro Val Phe Phe Gln Ser Cys Ala Lys Ala Val Met Trp Gln Lys		
1090	1095	1100
Met Leu Phe Gly Leu Cys Phe Phe His Ala Val Val Gln Glu Arg Arg		
1105	1110	1115
Asn Phe Gly Pro Leu Gly Trp Asn Ile Pro Tyr Glu Phe Asn Glu Ser		
1125	1130	1135
Asp Leu Arg Thr Ser Met Trp Gln Ile Gln Met Phe Leu Asn Asp Tyr		
1140	1145	1150
Lys Glu Val Pro Phe Asp Ala Leu Thr Tyr Leu Thr Gly Glu Cys Asn		
1155	1160	1165
Tyr Gly Gly Arg Val Thr Asp Asp Lys Asp Arg Arg Leu Leu Leu Ser		
1170	1175	1180
Leu Leu Ser Met Phe Tyr Cys Lys Glu Ile Glu Glu Asp Tyr Tyr Ser		
1185	1190	1195
Leu Ala Pro Gly Asp Thr Tyr Tyr Ile Pro Pro His Gly Ser Tyr Gln		
1205	1210	1215
Ser Tyr Ile Asp Tyr Leu Arg Asn Leu Pro Ile Thr Ala His Pro Glu		
1220	1225	1230
Val Phe Gly Leu His Glu Asn Ala Asp Ile Thr Lys Asp Asn Gln Glu		
1235	1240	1245
Thr Asn Gln Leu Phe Glu Gly Val Leu Leu Thr Leu Pro Arg Gln Ser		
1250	1255	1260
Gly Gly Ser Gly Lys Ser Pro Gln Glu Val Val Glu Glu Leu Ala Gln		
1265	1270	1275
Asp Ile Leu Ser Lys Leu Pro Arg Asp Phe Asp Leu Glu Glu Val Met		
1285	1290	1295
Lys Leu Tyr Pro Val Val Tyr Glu Glu Ser Met Asn Thr Val Leu Arg		
1300	1305	1310
Gln Glu Leu Ile Arg Phe Asn Arg Leu Thr Lys Val Val Arg Arg Ser		
1315	1320	1325
Leu Ile Asn Leu Gly Arg Ala Ile Lys Gly Gln Val Leu Met Ser Ser		

1330	1335	1340	
Glu Leu Glu Glu Val Phe Asn Ser Met Leu Val Gly Lys Val Pro Ala			
1345	1350	1355	1360
Met Trp Ala Ala Lys Ser Tyr Pro Ser Leu Lys Pro Leu Gly Gly Tyr			
1365	1370	1375	
Val Ala Asp Leu Leu Ala Arg Leu Thr Phe Phe Gln Glu Trp Ile Asp			
1380	1385	1390	
Lys Gly Pro Pro Val Val Phe Trp Ile Ser Gly Phe Tyr Phe Thr Gln			
1395	1400	1405	
Ser Phe Leu Thr Gly Val Ser Gln Asn Tyr Ala Arg Lys Tyr Thr Ile			
1410	1415	1420	
Pro Ile Asp His Ile Gly Phe Glu Phe Glu Val Thr Pro Gln Glu Thr			
1425	1430	1435	1440
Val Met Glu Asn Asn Pro Glu Asp Gly Ala Tyr Ile Lys Gly Leu Phe			
1445	1450	1455	
Leu Glu Gly Ala Arg Trp Asp Arg Lys Thr Met Gln Ile Gly Glu Ser			
1460	1465	1470	
Leu Pro Lys Ile Leu Tyr Asp Pro Leu Pro Ile Ile Trp Leu Lys Pro			
1475	1480	1485	
Gly Glu Ser Ala Met Phe Leu His Gln Asp Ile Tyr Val Cys Pro Val			
1490	1495	1500	
Tyr Lys Thr Ser Ala Arg Arg Gly Thr Leu Ser Thr Thr Gly His Ser			
1505	1510	1515	1520
Thr Asn Tyr Val Leu Ser Ile Glu Leu Pro Thr Asp Met Pro Gln Lys			
1525	1530	1535	
His Trp Ile Asn Arg Gly Val Ala Ser Leu Cys Gln Leu Asp Asn			
1540	1545	1550	

<210> 3836

<211> 416

<212> PRT

<213> Homo sapiens

<400> 3836

Met Gln Gly Ala Pro Arg Ala Arg Phe Gly Ser Arg Thr Pro Pro Ala

1	5	10	15
Ala Ala Ala Ser Ser Ser Ser Pro Ser Cys Thr Pro Ala Thr Ser Gln			
20	25	30	
Gly His Leu Arg Thr Pro Ala Gln Pro Pro Pro Ala Ser Pro Ala Ala			
35	40	45	
Ser Ser Ser Ser Ser Phe Ala Ala Val Val Arg Tyr Gly Pro Gly Ala			
50	55	60	
Ala Ala Ala Ala Gly Thr Gly Gly Thr Gly Ser Asp Ser Ala Ser Leu			
65	70	75	80
Glu Leu Ser Ala Glu Ser Arg Met Ile Leu Asp Ala Phe Ala Gln Gln			
85	90	95	
Cys Ser Arg Val Leu Ser Leu Leu Asn Cys Gly Gly Lys Leu Leu Asp			
100	105	110	
Ser Asn His Ser Gln Ser Met Ile Ser Cys Val Lys Gln Glu Gly Ser			
115	120	125	
Ser Tyr Asn Glu Arg Gln Glu His Cys His Ile Gly Lys Gly Val His			
130	135	140	
Ser Gln Thr Ser Asp Asn Val Asp Ile Glu Met Gln Tyr Met Gln Arg			
145	150	155	160
Lys Gln Gln Thr Ser Ala Phe Leu Arg Val Phe Thr Asp Ser Leu Gln			
165	170	175	
Asn Tyr Leu Leu Ser Gly Ser Phe Pro Thr Pro Asn Pro Ser Ser Ala			
180	185	190	
Ser Glu Tyr Gly His Leu Ala Asp Val Asp Pro Leu Ser Thr Ser Pro			
195	200	205	
Val His Thr Leu Gly Gly Trp Thr Ser Pro Ala Thr Ser Glu Ser His			
210	215	220	
Gly His Pro Ser Ser Ser Thr Leu Pro Glu Glu Glu Glu Glu Glu Asp			
225	230	235	240
Glu Glu Gly Tyr Cys Pro Arg Cys Gln Glu Leu Glu Gln Glu Val Ile			
245	250	255	
Ser Leu Gln Gln Glu Asn Glu Glu Leu Arg Arg Lys Leu Glu Ser Ile			
260	265	270	
Pro Val Pro Cys Gln Thr Val Leu Asp Tyr Leu Lys Met Val Leu Gln			
275	280	285	
His His Asn Gln Leu Leu Ile Pro Gln Pro Ala Asp Gln Pro Thr Glu			

290	295	300	
Gly Ser Lys Gln Leu Leu Asn Asn Tyr Pro Val Tyr Ile Thr Ser Lys			
305	310	315	320
Gln Trp Asp Glu Ala Val Asn Ser Ser Lys Lys Asp Gly Arg Arg Leu			
	325	330	335
Leu Arg Tyr Leu Ile Arg Phe Val Phe Thr Thr Asp Glu Leu Lys Tyr			
	340	345	350
Ser Cys Gly Leu Gly Lys Arg Lys Arg Ser Val Gln Ser Gly Glu Thr			
	355	360	365
Gly Pro Glu Arg Arg Pro Leu Asp Pro Val Lys Val Thr Cys Leu Arg			
	370	375	380
Gly Thr Ala Ser Phe Arg Ser Val Ser Pro Ser Val Ile Ser Phe His			
385	390	395	400
Arg Ile Gly Cys Gly Ser Pro Arg Thr Ser Val Gln Pro Ser Val Phe			
	405	410	415

<210> 3837

<211> 189

<212> PRT

<213> Homo sapiens

<400> 3837

Met Arg Asn Gln Ala Val Asn Val Ala Cys Arg Phe His Val Asp Val			
1	5	10	15
Ser Phe Gln Ile Ser Gly Phe Asn Ile Cys Asp Ala Leu Gly Thr Cys			
	20	25	30
Gly Ser Ser Pro Leu Ser Phe Val Ser His Cys Pro Thr Gly Cys Gln			
	35	40	45
Arg Gly Cys Ala Met Ser Tyr Ser Gln Gln Thr Trp Met Arg Val Ser			
	50	55	60
Arg Thr Pro Asn Ser Pro Ser Ile Trp Cys Cys Gln Cys Cys Leu Gly			
65	70	75	80
Arg Leu Met Gly Ser Pro Ser Cys His Pro Pro Val Gly Pro Thr Met			
	85	90	95
Gly Pro Arg Gly Ser Gly Arg Ala Pro Phe Thr Ile Met His Asp Phe			

100 105 110
 Val Cys Cys Leu Leu Ser Pro Gln Asp Pro Pro Gly Phe Trp Pro His
 115 120 125
 Met Phe Gln Pro Gly Pro Gly Leu Gly Thr Arg Glu Val Leu Gly Ser
 130 135 140
 Trp Cys Arg Leu Leu Pro Gly Leu Gly Glu Leu Leu Ala Ala Leu Ser
 145 150 155 160
 Ser Leu Leu Gly Asp Pro Gly Phe Cys Ser Gly Lys Val Pro Ile Pro
 165 170 175
 Leu Ile His Pro Ile Ser Ser Gly Thr Leu Trp Leu Ser
 180 185

<210> 3838

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3838

Met Ala Leu Lys Phe Gln Gly Lys Tyr Asp Gln Ala Val His Gln Glu
 1 5 10 15
 Ala Gln Met Pro His Gly Gln Gly Asn Ser Phe Ser Arg Arg Pro Thr
 20 25 30
 Asp Phe Ser Cys Leu Gly Ser Glu Glu Ala Thr Lys Ile Cys Pro Ser
 35 40 45
 Thr Arg Leu Ser Gly Glu Met Ser Arg Leu His Phe His Gln Ser Leu
 50 55 60
 Ser Ser Ser Pro Thr Pro Gln Thr Thr Gly Arg Leu Gly Gly Ser Ser
 65 70 75 80
 Lys Phe Leu Val Ala Asp Ser Leu Val Val Ile Met Phe Gln Lys Leu
 85 90 95
 Lys Trp Glu Trp Lys Leu Ser Ser Phe Leu Tyr Ser Lys Asn Cys Leu
 100 105 110
 Gln His Ile Pro
 115

<210> 3839

<211> 1264

<212> PRT

<213> Homo sapiens

<400> 3839

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Met Ser Leu Gln Arg Glu Pro Pro Arg Pro Glu Pro Pro Pro Pro Phe
 1             5             10             15
Pro Pro Leu Pro Leu Gln Pro Pro Pro Pro Arg Glu Ser Ala Ser Arg
      20             25             30
Ala Glu Gln Pro Pro Arg Pro Pro Arg Glu Thr Val Arg Leu Glu Leu
      35             40             45
Val Leu Lys Asp Pro Thr Asp Glu Ser Cys Val Glu Phe Ser Tyr Pro
      50             55             60
Glu Leu Leu Leu Cys Gly Glu Gln Arg Lys Lys Leu Ile His Thr Glu
 65             70             75             80
Asp Pro Phe Asn Asp Glu His Gln Glu Arg Gln Glu Val Glu Met Leu
      85             90             95
Ala Lys Lys Phe Glu Met Lys Tyr Gly Gly Lys Pro Arg Lys His Arg
      100            105            110
Lys Asp Arg Leu Gln Asp Leu Ile Asp Ile Gly Phe Gly Tyr Asp Glu
      115            120            125
Thr Asp Pro Phe Ile Asp Asn Ser Glu Ala Tyr Asp Glu Leu Val Pro
      130            135            140
Ala Ser Leu Thr Thr Lys Tyr Gly Gly Phe Tyr Ile Asn Thr Gly Thr
 145            150            155            160
Leu Gln Phe Arg Gln Ala Ser Asp Thr Glu Glu Asp Asp Ile Thr Asp
      165            170            175
Asn Gln Lys His Lys Pro Pro Lys Val Pro Lys Ile Lys Glu Asp Asp
      180            185            190
Ile Glu Met Lys Lys Arg Lys Arg Lys Glu Glu Gly Glu Lys Glu Lys
      195            200            205
Lys Pro Arg Lys Lys Val Pro Lys Gln Leu Gly Val Val Ala Leu Asn
      210            215            220

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Ser His Lys Ser Glu Lys Lys Lys Lys Arg Tyr Lys Asp Ser Leu Ser
 225 230 235 240
 Leu Ala Ala Met Ile Arg Lys Phe Gln Lys Glu Lys Asp Ala Leu Lys
 245 250 255
 Lys Glu Ser Asn Pro Lys Val Pro Val Thr Leu Ser Thr Pro Ser Leu
 260 265 270
 Asn Lys Pro Pro Cys Ala Ala Ala Ala Leu Gly Asn Asp Val Pro Asp
 275 280 285
 Leu Asn Leu Ser Ser Gly Asp Pro Asp Leu Pro Ile Phe Val Ser Thr
 290 295 300
 Asn Glu His Glu Leu Phe Gln Glu Ala Glu Asn Ala Leu Glu Met Leu
 305 310 315 320
 Asp Asp Phe Asp Phe Asp Arg Leu Leu Asp Ala Ala Ser Asp Gly Ser
 325 330 335
 Pro Leu Ser Glu Ser Gly Gly Glu Asn Gly Thr Thr Thr Gln Pro Thr
 340 345 350
 Tyr Thr Ser Gln Val Met Pro Lys Val Val Pro Thr Leu Pro Glu Gly
 355 360 365
 Leu Pro Val Leu Leu Glu Lys Arg Ile Glu Asp Leu Arg Val Ala Ala
 370 375 380
 Lys Leu Phe Asp Glu Glu Gly Arg Lys Lys Phe Phe Thr Gln Asp Met
 385 390 395 400
 Asn Asn Ile Leu Leu Asp Ile Glu Leu Gln Leu Gln Glu Leu Gly Pro
 405 410 415
 Val Ile Arg Ser Gly Val Tyr Ser His Leu Glu Ala Phe Val Pro Cys
 420 425 430
 Asn Lys Glu Thr Leu Val Lys Arg Leu Lys Lys Leu His Leu Asn Val
 435 440 445
 Gln Asp Asp Arg Leu Arg Glu Pro Leu Gln Lys Leu Lys Leu Ala Val
 450 455 460
 Ser Asn Val Met Pro Glu Gln Leu Phe Lys Tyr Gln Glu Asp Cys Gln
 465 470 475 480
 Ala Arg Ser Gln Ala Lys Cys Ala Lys Leu Gln Thr Asp Glu Glu Arg
 485 490 495
 Glu Lys Asn Gly Ser Glu Glu Asp Asp Asp Glu Lys Pro Gly Lys Arg
 500 505 510

Val Ile Gly Pro Arg Lys Lys Phe His Trp Asp Asp Thr Ile Arg Thr
 515 520 525
 Leu Leu Cys Asn Leu Val Glu Ile Lys Leu Gly Cys Tyr Glu Leu Glu
 530 535 540
 Pro Asn Lys Ser Gln Ser Ala Glu Asp Tyr Leu Lys Ser Phe Met Glu
 545 550 555 560
 Thr Glu Val Lys Pro Leu Trp Pro Lys Gly Trp Met Gln Ala Arg Met
 565 570 575
 Leu Phe Lys Glu Ser Arg Ser Val His Asn His Leu Thr Ser Ala Pro
 580 585 590
 Ala Lys Lys Lys Val Ile Pro Ala Pro Lys Pro Lys Val Lys Glu Val
 595 600 605
 Met Val Lys Thr Leu Pro Leu His Ser Phe Pro Thr Met Leu Lys Glu
 610 615 620
 Cys Ser Pro Lys Lys Asp Gln Lys Thr Pro Thr Ser Leu Val Ala Ser
 625 630 635 640

 Val Ser Gly Pro Pro Thr Ser Ser Ser Thr Ala Ala Ile Ala Ala Ala
 645 650 655
 Ser Ser Ser Ser Ala Pro Ala Gln Glu Thr Ile Cys Leu Asp Asp Ser
 660 665 670
 Leu Asp Glu Asp Leu Ser Phe His Ser Pro Ser Leu Asp Leu Val Ser
 675 680 685
 Glu Ala Leu Ala Val Ile Asn Asn Gly Asn Lys Gly Pro Pro Val Gly
 690 695 700
 Ser Arg Ile Ser Met Pro Thr Thr Lys Pro Arg Pro Gly Leu Arg Glu
 705 710 715 720
 Glu Lys Leu Ala Ser Ile Met Ser Lys Leu Pro Leu Ala Thr Pro Lys
 725 730 735
 Lys Leu Asp Ser Thr Gln Thr Thr His Ser Ser Ser Leu Ile Ala Gly
 740 745 750
 His Thr Gly Pro Val Pro Lys Lys Pro Gln Asp Leu Ala His Thr Gly
 755 760 765
 Ile Ser Ser Gly Leu Ile Ala Gly Ser Ser Ile Gln Asn Pro Lys Val
 770 775 780
 Ser Leu Glu Pro Leu Pro Ala Arg Leu Leu Gln Gln Gly Leu Gln Arg

785	790	795	800
Ser Ser Gln Ile His Thr Ser Ser Ser Ser Gln Thr His Val Ser Ser			
805	810	815	
Ser Ser Gln Ala Gln Ile Ala Ala Ser Ser His Ala Leu Gly Thr Ser			
820	825	830	
Glu Ala Gln Asp Ala Ser Ser Leu Thr Gln Val Thr Lys Val His Gln			
835	840	845	
His Ser Ala Val Gln Gln Asn Tyr Val Ser Pro Leu Gln Ala Thr Ile			
850	855	860	
Ser Lys Ser Gln Thr Asn Pro Val Val Lys Leu Ser Asn Asn Pro Gln			
865	870	875	880
Leu Ser Cys Ser Ser Ser Leu Ile Lys Thr Ser Asp Lys Pro Leu Met			
885	890	895	
Tyr Arg Leu Pro Leu Ser Thr Pro Ser Pro Gly Asn Gly Ser Gln Gly			
900	905	910	
Ser His Pro Leu Val Ser Arg Thr Val Pro Ser Thr Thr Thr Ser Ser			
915	920	925	
Asn Tyr Leu Ala Lys Ala Met Val Ser Gln Ile Ser Thr Gln Gly Phe			
930	935	940	
Lys Ser Pro Phe Ser Met Ala Ala Ser Pro Lys Leu Ala Ala Ser Pro			
945	950	955	960
Lys Pro Ala Thr Ser Pro Lys Pro Leu Pro Ser Pro Lys Pro Ser Ala			
965	970	975	
Ser Pro Lys Pro Ser Leu Ser Ala Lys Pro Ser Val Ser Thr Lys Leu			
980	985	990	
Ile Ser Lys Ser Asn Pro Thr Pro Lys Pro Thr Val Ser Pro Ser Ser			
995	1000	1005	
Ser Ser Pro Asn Ala Leu Val Ala Gln Gly Ser His Ser Ser Thr Asn			
1010	1015	1020	
Ser Pro Val His Lys Gln Pro Ser Gly Met Asn Ile Ser Arg Gln Ser			
1025	1030	1035	1040
Pro Thr Leu Asn Leu Leu Pro Ser Ser Arg Thr Ser Gly Leu Pro Pro			
1045	1050	1055	
Thr Lys Asn Leu Gln Ala Pro Ser Lys Leu Thr Asn Ser Ser Ser Thr			
1060	1065	1070	
Gly Thr Val Gly Lys Asn Ser Leu Ser Gly Ile Ala Met Asn Val Pro			

1075	1080	1085
Ala Ser Arg Gly Ser Asn Leu Asn Ser Ser Gly Ala Asn Arg Thr Ser		
1090	1095	1100
Leu Ser Gly Gly Thr Gly Ser Gly Thr Gln Gly Ala Thr Lys Pro Leu		
1105	1110	1115
Ser Thr Pro His Arg Pro Ser Thr Ala Ser Gly Ser Ser Val Val Thr		
1125	1130	1135
Ala Ser Val Gln Ser Thr Ala Gly Ala Ser Leu Leu Ala Asn Ala Ser		
1140	1145	1150
Pro Leu Thr Leu Met Thr Ser Pro Leu Ser Val Thr Asn Gln Asn Val		
1155	1160	1165
Thr Pro Phe Gly Met Leu Gly Gly Leu Val Pro Val Thr Met Pro Phe		
1170	1175	1180
Gln Phe Pro Leu Glu Ile Phe Gly Phe Gly Thr Asp Thr Ala Gly Val		
1185	1190	1195
Thr Thr Thr Ser Gly Ser Thr Ser Ala Ala Phe His His Ser Leu Thr		
1205	1210	1215
Gln Asn Leu Leu Lys Gly Leu Gln Pro Gly Gly Ala Gln His Ala Ala		
1220	1225	1230
Thr Leu Ser His Ser Pro Leu Pro Ala His Leu Gln Gln Ala Phe His		
1235	1240	1245
Asp Gly Gly Gln Ser Lys Gly Asp Thr Lys Leu Pro Arg Lys Ser Gln		
1250	1255	1260

<210> 3840

<211> 1215

<212> PRT

<213> Homo sapiens

<400> 3840

Met Ala Met Arg Leu His Phe Gln Pro Pro His Pro Asn Cys Leu Tyr		
1	5	10
Thr Val Glu Leu Glu Ala Phe Ala Ile Tyr Lys Val Leu Gln Ser Tyr		
20	25	30
Ser Asn Ile Glu Glu Asp Cys Thr Met Cys Pro Ser Trp Cys Leu Thr		

35	40	45
Val Arg Ala Arg Gly His Ser Tyr Phe Ala Gly Phe Glu His His Ile		
50	55	60
Pro Gln Tyr Ser Leu Asp Val Pro Lys Leu Phe Pro Ala Val Ser Ser		
65	70	75
Gly Glu Pro Thr Tyr Arg Ser Leu Leu Leu Val Asn Lys Asp Cys Lys		
85	90	95
Leu Leu Thr Phe Ser Leu Ala Pro Gln Arg Gly Ser Asp Val Ile Leu		
100	105	110
Arg Pro Thr Ser Gly Leu Val Ala Pro Gly Ala His Gln Ile Ile Leu		
115	120	125
Ile Cys Thr Tyr Pro Glu Gly Ser Ser Trp Lys Gln His Thr Phe Tyr		
130	135	140
Leu Gln Cys Asn Ala Ser Pro Gln Tyr Leu Lys Glu Val Ser Met Tyr		
145	150	155
Ser Arg Glu Glu Pro Leu Gln Leu Lys Leu Asp Thr His Lys Ser Leu		
165	170	175
Tyr Phe Lys Pro Thr Trp Val Gly Cys Ser Ser Thr Ser Pro Phe Thr		
180	185	190
Phe Arg Asn Pro Ser Arg Leu Pro Leu Gln Phe Glu Trp Arg Val Ser		
195	200	205
Glu Gln His Arg Lys Leu Leu Ala Val Gln Pro Ser Arg Gly Leu Ile		
210	215	220
Gln Pro Asn Glu Arg Leu Thr Leu Thr Trp Thr Phe Ser Pro Leu Glu		
225	230	235
Glu Thr Lys Tyr Leu Phe Gln Val Gly Met Trp Val Trp Glu Ala Gly		
245	250	255
Leu Ser Pro Asn Ala Asn Pro Ala Ala Thr Thr His Tyr Met Leu Arg		
260	265	270
Leu Val Gly Val Gly Leu Thr Ser Ser Leu Ser Ala Lys Glu Lys Glu		
275	280	285
Leu Ala Phe Gly Asn Val Leu Val Asn Ser Lys Gln Ser Arg Phe Leu		
290	295	300
Val Leu Leu Asn Asp Gly Asn Cys Thr Leu Tyr Tyr Arg Leu Tyr Leu		
305	310	315
Glu Gln Gly Ser Pro Glu Ala Val Asp Asn His Pro Leu Ala Leu Gln		

	325		330		335
Leu Asp Arg Thr Glu Gly Ser Met Pro Pro Arg Ser Gln Asp Thr Ile					
	340		345		350
Cys Leu Thr Ala Cys Pro Lys Gln Arg Ser Gln Tyr Ser Trp Thr Ile					
	355		360		365
Thr Tyr Ser Leu Leu Ser His Arg Asp Asn Lys Ala Gly Gly Lys Gln					
	370		375		380
Glu Leu Cys Cys Val Ser Leu Val Ala Val Tyr Pro Leu Leu Ser Ile					
385		390		395	400
Leu Asp Val Ser Ser Met Gly Ser Ala Glu Gly Ile Thr Arg Lys His					
	405		410		415
Leu Trp Arg Leu Phe Ser Leu Asp Leu Leu Asn Ser Tyr Leu Glu Arg					
	420		425		430
Asp Pro Thr Pro Cys Glu Leu Thr Tyr Lys Val Pro Thr Arg His Ser					
	435		440		445
Met Ser Gln Ile Pro Pro Val Leu Thr Pro Leu Arg Leu Asp Phe Asn					
	450		455		460
Phe Gly Ala Ala Pro Phe Lys Ala Pro Pro Ser Val Val Phe Leu Ala					
465		470		475	480
Leu Lys Asn Ser Gly Val Val Ser Leu Asp Trp Ala Phe Leu Leu Pro					
	485		490		495
Ser Asp Gln Arg Ile Asp Val Glu Leu Trp Ala Glu Gln Ala Glu Leu					
	500		505		510
Asn Ser Thr Glu Leu His Gln Met Arg Val Gln Asp Asn Cys Leu Phe					
	515		520		525
Ser Ile Ser Pro Lys Ala Gly Ser Leu Ser Pro Gly Gln Glu Gln Met					
	530		535		540
Val Glu Leu Lys Tyr Ser His Leu Phe Ile Gly Thr Asp His Leu Pro					
545		550		555	560
Val Leu Phe Lys Val Ser His Gly Arg Glu Ile Leu Leu Asn Phe Ile					
	565		570		575
Gly Val Thr Val Lys Pro Glu Gln Lys Tyr Val His Phe Thr Ser Thr					
	580		585		590
Thr His Gln Phe Ile Pro Ile Pro Ile Gly Asp Thr Leu Pro Pro Arg					
	595		600		605
Gln Ile Tyr Glu Leu Tyr Asn Gly Gly Ser Val Pro Val Thr Tyr Glu					

610	615	620	
Val Gln Thr Asp	Val Leu Ser Gln	Val Gln Glu Lys Asn	Phe Asp His
625	630	635	640
Pro Ile Phe Cys	Cys Leu Asn Pro	Lys Gly Glu Ile	Gln Pro Gly Ser
	645	650	655
Thr Ala Arg Val	Leu Trp Ile Phe	Ser Pro Ile Glu	Ala Lys Thr Tyr
	660	665	670
Thr Val Asp Val	Pro Ile His Ile	Leu Gly Trp Asn	Ser Ala Leu Ile
	675	680	685
His Phe Gln Gly	Val Gly Tyr Asn	Pro His Met Met	Gly Asp Thr Ala
	690	695	700
Pro Phe His Asn	Ile Ser Ser Trp	Asp Asn Ser Ser	Ile His Ser Arg
705	710	715	720
Leu Val Val Pro	Gly Gln Asn Val	Phe Leu Ser Gln	Ser His Ile Ser
	725	730	735
Leu Gly Asn Ile	Pro Val Gln Ser	Lys Cys Ser Arg	Leu Leu Phe Leu
	740	745	750
Asn Asn Ile Ser	Lys Asn Glu Glu	Ile Ala Phe Ser	Trp Gln Pro Ser
	755	760	765
Pro Leu Asp Phe	Gly Glu Val Ser	Val Ser Pro Met	Ile Gly Val Val
	770	775	780
Ala Pro Glu Glu	Thr Val Pro Phe	Val Val Thr Leu	Arg Ala Ser Val
785	790	795	800
His Ala Ser Phe	Tyr Ser Ala Asp	Leu Val Cys Lys	Leu Tyr Ser Gln
	805	810	815
Gln Leu Met Arg	Gln Tyr His Lys	Glu Leu Gln Glu	Trp Lys Asp Glu
	820	825	830
Lys Val Arg Gln	Glu Val Glu Phe	Thr Ile Thr Asp	Met Lys Val Lys
	835	840	845
Lys Arg Thr Cys	Cys Thr Ala Cys	Glu Pro Ala Arg	Lys Tyr Lys Thr
	850	855	860
Leu Pro Pro Ile	Lys Asn Gln Gln	Ser Val Ser Arg	Pro Ala Ser Trp
865	870	875	880
Lys Leu Gln Thr	Pro Lys Glu Glu	Val Ser Trp Pro	Cys Pro Gln Pro
	885	890	895
Pro Ser Pro Gly	Ile Leu Cys Leu	Gly Leu Thr Ala	Arg Ala His Ala

900	905	910
Thr Asp Tyr Phe Leu Ala Asn Phe Phe Ser Gly Phe Pro Cys His Phe		
915	920	925
Leu His Arg Glu Leu Pro Lys Arg Lys Ala Pro Arg Glu Glu Ser Glu		
930	935	940
Thr Ser Glu Glu Lys Ser Pro Asn Lys Trp Gly Pro Val Ser Lys Gln		
945	950	955
Lys Lys Gln Leu Leu Val Asp Ile Leu Thr Thr Ile Ile Arg Gly Leu		
965	970	975
Leu Glu Asp Lys Asn Phe His Glu Ala Val Asp Gln Ser Leu Val Glu		
980	985	990
Gln Val Pro Tyr Phe Arg Gln Phe Trp Asn Glu Gln Ser Thr Lys Phe		
995	1000	1005
Met Asp Gln Lys Asn Ser Leu Tyr Leu Met Pro Ile Leu Pro Val Pro		
1010	1015	1020
Ser Ser Ser Trp Glu Asp Gly Lys Gly Lys Gln Pro Lys Glu Asp Arg		
1025	1030	1035
Pro Glu His Tyr Pro Gly Leu Gly Lys Lys Glu Glu Gly Glu Glu Glu		
1045	1050	1055
Lys Gly Glu Glu Glu Glu Glu Glu Leu Glu Glu Glu Glu Glu Glu Glu		
1060	1065	1070
Glu Glu Thr Glu Glu Glu Glu Leu Gly Lys Glu Glu Ile Glu Glu Lys		
1075	1080	1085
Glu Glu Glu Arg Asp Glu Lys Glu Glu Lys Val Ser Trp Ala Gly Ile		
1090	1095	1100
Gly Pro Thr Pro Gln Pro Glu Ser Gln Glu Ser Met Gln Trp Gln Trp		
1105	1110	1115
Gln Gln Gln Leu Asn Val Met Val Lys Glu Glu Gln Glu Gln Asp Glu		
1125	1130	1135
Lys Glu Ala Ile Arg Arg Leu Pro Ala Phe Ala Asn Leu Gln Glu Ala		
1140	1145	1150
Leu Leu Glu Asn Met Ile Gln Asn Ile Leu Val Glu Ala Ser Arg Gly		
1155	1160	1165
Glu Val Val Leu Thr Ser Arg Pro Arg Val Ile Ala Leu Pro Pro Phe		
1170	1175	1180
Cys Val Pro Arg Ser Leu Thr Pro Asp Thr Leu Leu Pro Thr Gln Gln		

1185 1190 1195 1200
 Ala Glu Val Leu His Pro Val Val Pro Leu Pro Thr Asp Leu Pro
 1205 1210 1215

<210> 3841

<211> 124

<212> PRT

<213> Homo sapiens

<400> 3841

Met Gly Glu Asn Ala Val Ile Pro Phe Leu Ser Pro Gln Lys Gly His
 1 5 10 15
 Gly Cys Arg Glu Trp Trp Leu Met Pro Ile Ile Pro Ala Leu Trp Glu
 20 25 30
 Ala Glu Val Gly Arg Ser Pro Glu Val Arg Ser Leu Arg Pro Ala Trp
 35 40 45
 Leu Thr Trp Arg Asn Pro Phe Ser Thr Lys Asn Thr Lys Ile Ser Gln
 50 55 60
 Ser Trp Trp Arg Ala Pro Val Ile Pro Ala Thr Trp Glu Thr Glu Ala
 65 70 75 80
 Gly Glu Ser Leu Glu Pro Gly Arg Leu Glu Val Ala Val Ser Arg Asp
 85 90 95
 Trp Ala Thr Ala Leu Gln Pro Gly Gln Trp Ser Ile Ser Lys Lys Lys
 100 105 110
 Lys Glu Arg Lys Lys Lys Glu Gly Gly Cys His Gly
 115 120

<210> 3842

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3842

Met Arg Gly Leu Gln Trp Asn Gln Asp Pro Glu His Arg Arg Val Gly

1 5 10 15
 Ser Pro Ala Cys Ser Ala Ser Ser Phe Leu Leu Leu Leu Leu Phe Glu
 20 25 30
 Thr Glu Ser Cys Ser Val Phe Arg Leu Glu Cys Ser Gly Arg Ile Leu
 35 40 45
 Ala His Cys Asn Leu His Leu Pro Gly Ser Ser Asp Ser Pro Ala Ser
 50 55 60
 Ala Ser Arg Val Ala Gly Thr Thr Gly Met Cys His His Ala Leu Leu
 65 70 75 80
 Ile Phe Val Phe Leu Val Glu Met Gly Phe His Tyr Val Gly Gln Val
 85 90 95
 Gly Leu Asp Leu Leu Thr Leu
 100

<210> 3843

<211> 151

<212> PRT

<213> Homo sapiens

<400> 3843

Met Val Pro Met His Cys Phe Trp Val Ile Ile Arg Arg Arg Met Asn
 1 5 10 15
 Ser Gly His Trp Ala Thr Asp Gly Gln Leu Leu Ala Pro Gly Leu Gly
 20 25 30
 Leu Cys Val Gly Thr His Ala Ser Ala Leu Thr Cys Ser Cys Ser Ser
 35 40 45
 Met Val Pro Ser Leu Ile Cys Gly Val Gln Arg Arg Arg Met Ala Ala
 50 55 60
 Ser Leu Leu Tyr Pro Val Tyr Pro Ser Pro Cys Cys Trp His Leu Arg
 65 70 75 80
 Leu Ser Pro His Ala Leu Ile Ser Leu Cys Thr Thr Tyr Gln Glu Val
 85 90 95
 Leu Gln Trp Trp Leu Cys Leu Pro Ser Leu Arg Thr Leu Lys Thr Leu
 100 105 110
 Ala Leu Pro Arg Gln Gln Ala Leu Pro Thr Ser Ala Phe Pro Pro Asn

115	120	125
Asp Met Ala Met Phe Cys Phe Pro Arg Ser Ile Leu Ser His Ser Gln		
130	135	140
Gln Gly Val Asp Ile Leu Val		
145	150	

<210> 3844

<211> 267

<212> PRT

<213> Homo sapiens

<400> 3844

Met Pro Thr Leu His Arg Glu Arg Gln Gly Leu Ser Pro Lys Glu Ala			
1	5	10	15
Met Leu Cys Phe Ile Gln Glu Ala Cys Arg Leu Glu Asp Val Pro Val			
20	25	30	
His Phe Phe Arg Leu His Lys Asp Lys Lys Glu Gly Arg Pro Thr Val			
35	40	45	
Ile Leu Gly Leu Ala Leu Arg Gly Val His Ile Tyr Gln Glu Val Asp			
50	55	60	
Arg Ala Pro Gln Leu Leu Tyr Asp Leu Pro Trp Pro His Val Gly Lys			
65	70	75	80
Leu Ala Phe Leu Gly Lys Lys Leu Glu Ile Gln Leu Asp Gly Leu Pro			
85	90	95	
Ala Ala Gln Lys Leu Val Tyr Tyr Thr Gly Cys Thr Trp Arg Ser Arg			
100	105	110	
His Leu Leu His Leu Leu Arg Ala Ser His Gln Leu His Leu Arg Val			
115	120	125	
Arg Pro Thr Leu Gln Gln Leu Arg Gln Arg Glu Glu Ala Glu Glu Lys			
130	135	140	
Gln His Tyr Arg Glu Ser Tyr Ile Ser Asp Glu Leu Glu Leu Asp Leu			
145	150	155	160
Ala Ser Arg Ser Phe Pro Gly Ser Gly Val Ser Ser Gln His Cys Pro			
165	170	175	
His Cys Leu Ser Arg His Ser Ala Asp Ser His Gly Ser Ser Tyr Thr			

180 185 190
 Ser Gly Ile Lys Ala Asn Ser Trp Leu Arg Glu Ser Arg Glu Met Ser
 195 200 205
 Val Asp Val Pro Leu Glu Val His Gly Leu His Glu Lys Glu Pro Ser
 210 215 220
 Ser Ser Pro Arg Thr Ser Arg Ser His Pro Ser Thr Arg Gly Asp Ser
 225 230 235 240
 Gln Ala Thr Arg Gln Glu Pro Cys Thr Gln Val Arg Thr Arg Gly Gln
 245 250 255
 Ser Ala Glu Ala Val His Gln Phe Pro Pro Val
 260 265

<210> 3845

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3845

Met Leu Glu Glu Pro Phe Ser Pro Pro Leu Arg Cys Gly Gly Pro Ser
 1 5 10 15
 Leu Gly Trp Pro Arg Pro Glu Pro Ala Pro Ser Ala Cys Arg Glu Val
 20 25 30
 Trp Arg Glu Arg Pro Gln Ala Gly Thr Gly Ala Ala Arg Ser Asp Gly
 35 40 45
 Arg Pro Ala Arg Val Pro Ser Gly Ser Gly Leu Ser Gly Ser Cys Gly
 50 55 60
 Gly Gly Ala Gly Tyr Pro Ser Thr Ala Gly Leu Pro Ala Pro Arg Ser
 65 70 75 80
 Asn Ser Arg Ser Ala Ser Ala Ala Ser Pro Pro Gly Arg Ala Arg Asp
 85 90 95
 Leu Gln Pro Ala Leu Pro Glu Ser Thr Arg Gly Gly Leu Pro Ala Ala
 100 105 110
 Lys Pro Pro
 115

<210> 3846

<211> 129

<212> PRT

<213> Homo sapiens

<400> 3846

```

Met Ser Ala His Gln Gln Gly Glu Thr Ser Leu Pro Arg Ala Gln Gly
  1              5              10              15
Gly Arg Ser Glu Leu Ala Asp Ser Ser Trp Lys Pro Val Arg Gly Ala
      20              25              30
Val Pro Arg Gly Met Thr Leu Ala Pro Ala Gln Ile Leu Leu Leu Cys
      35              40              45
Gly Leu Pro Gly Leu Pro Ser Pro Pro Pro Gly Leu Leu Trp Thr Asp
      50              55              60
Ile Ala Gln Ala Gly Val Gln Trp Cys Asp Leu Gly Ser Leu Gln Pro
      65              70              75              80
Pro Pro Pro Arg Phe Lys Leu Phe Ser Cys Leu Ser Leu Leu Ser Ser
      85              90              95
Trp Asp Tyr Arg Ser Trp Trp Leu Trp Leu Val Ile Pro Ala Ser Cys
      100             105             110
Trp Leu Gln Val Asp Asp Ala His Leu Ala Ala Asp Asp Leu Cys Thr
      115             120             125
Lys

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<210> 3847

<211> 217

<212> PRT

<213> Homo sapiens

<400> 3847

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Met Trp Val Thr Lys Phe Lys Gly Arg Glu Lys Lys Leu Met Lys Ile
  1              5              10              15
Glu Ala His Leu Gly Leu Pro Ser Phe Ser Gly Ser Thr Leu Asp Phe

```

	20		25		30
Phe	Arg	Ala	Trp	Ala	Leu
				Ser	Arg
				Glu	Leu
				His	Leu
				Ile	Pro
				Trp	Ala
	35		40		45
Ala	Arg	Ser	Ser	Leu	Gly
				Pro	Arg
				Leu	Trp
				Arg	Leu
				Leu	Gly
				Gly	Pro
	50		55		60
Phe	Leu	Cys	Leu	His	Ser
				Arg	Arg
				Leu	Ala
				Gly	Glu
				Thr	Gln
				Asp	Leu
	65		70		75
					80
Arg	Leu	Pro	Gly	His	Leu
				His	Cys
				Cys	Pro
				Leu	Gly
				Phe	Cys
				Leu	Arg
		85		90	
				95	
Leu	Cys	Leu	Gly	Leu	Cys
				Leu	Ser
				Leu	Arg
				Leu	Gln
				Leu	Gly
				Gly	Arg
	100		105		110
Leu	Leu	Val	Arg	Ala	Arg
				Phe	Gly
				Gly	Pro
				Gln	Gly
				Phe	Ser
				Ser	Pro
	115		120		125
Gly	Thr	Leu	Pro	Leu	Leu
				Val	Asp
				Gly	His
				Arg	Gly
				Arg	Ser
				Pro	Cys
	130		135		140
Leu	Gly	Leu	His	Pro	Ala
				Val	Ala
				Glu	Asp
				Leu	Val
				Asp	Val
				Glu	Pro
	145		150		155
					160
Pro	Val	Asp	Val	Gly	Leu
				Gln	His
				Val	Val
				Asp	Glu
				Val	Leu
				Ala	Leu
		165		170	
				175	
Ala	Cys	Gln	Val	Leu	Gly
				Ala	Trp
				Glu	Val
				Asp	Ala
				Val	Leu
				Leu	Leu
				Leu	
	180		185		190
Asp	Thr	Gln	His	Leu	Leu
				Asp	Val
				Gly	Val
				Val	Val
				Val	Gly
				His	Gly
				Ala	
	195		200		205
Ala	Asp	His	Asp	Val	Glu
				Asp	His
				Ala	
	210		215		

<210> 3848

<211> 143

<212> PRT

<213> Homo sapiens

<400> 3848

Met	Lys	Ser	Gln	Met	Glu	Leu	Arg	Ile	Lys	Asp	Leu	Glu	Phe	Lys	Leu
1				5				10					15		
Tyr	Lys	Ala	Arg	Thr	Ser	Gln	Ala	Asp	Cys	Asn	Thr	Thr	Glu	Leu	Glu

20 25 30
 Lys Tyr Lys Glu Leu Tyr Leu Glu Glu Leu Lys Leu Arg Glu Ser Leu
 35 40 45
 Ser Asp Glu Leu Asn Lys Arg Lys Glu Ile Leu Ala Asp Val Ser Thr
 50 55 60
 Lys Leu Leu Gln Glu Lys Glu Trp Ser Arg Ser Leu Phe Thr Ser His
 65 70 75 80
 Thr Thr Arg Pro Val Leu Glu Ser Ala Cys Asn Gly Asn Leu Asn Glu
 85 90 95
 Asn Leu Gly Leu Ser Arg Ile His Ile Pro Arg Glu Ala Leu Arg Ile
 100 105 110
 Pro Thr Leu Asn Ser Leu Ser Ser Asn Ile Arg Met Glu Ser Asp Leu
 115 120 125
 Ser Lys Glu Asp Lys Asn Gly Gly His Phe Leu Glu Leu Gln Ala
 130 135 140

<210> 3849

<211> 609

<212> PRT

<213> Homo sapiens

<400> 3849

Met Leu Leu Leu Ala Ser Thr Glu Pro Ser Ser Leu Cys Tyr Val Glu
 1 5 10 15
 Thr Val Asp Ile Asp Gly Glu Thr Asn Leu Lys Phe Arg Gln Ala Leu
 20 25 30
 Met Val Thr His Lys Glu Leu Ala Thr Ile Lys Lys Met Ala Ser Phe
 35 40 45
 Gln Gly Thr Val Thr Cys Glu Ala Pro Asn Ser Arg Met His His Phe
 50 55 60
 Val Gly Cys Leu Glu Trp Asn Asp Lys Lys Tyr Ser Leu Asp Ile Gly
 65 70 75 80
 Asn Leu Leu Leu Arg Gly Cys Arg Ile Arg Asn Thr Asp Thr Cys Tyr
 85 90 95
 Gly Leu Val Ile Tyr Ala Gly Phe Asp Thr Lys Ile Met Lys Asn Cys

100	105	110
Gly Lys Ile His Leu Lys Arg Thr Lys Leu Asp Leu Leu Val Asn Lys		
115	120	125
Leu Val Val Val Ile Phe Ile Ser Val Val Leu Val Cys Leu Val Leu		
130	135	140
Ala Phe Gly Phe Gly Phe Ser Val Lys Glu Phe Lys Asp His His Tyr		
145	150	155
Tyr Leu Ser Gly Val His Gly Ser Ser Val Ala Ala Glu Ser Phe Phe		
165	170	175
Val Phe Trp Ser Phe Leu Ile Leu Leu Ser Val Thr Ile Pro Met Ser		
180	185	190
Met Phe Ile Leu Ser Glu Phe Ile Tyr Leu Gly Asn Ser Val Phe Ile		
195	200	205
Asp Trp Asp Val Gln Met Tyr Tyr Lys Pro Gln Asp Val Pro Ala Lys		
210	215	220
Ala Arg Ser Thr Ser Leu Asn Asp His Leu Gly Gln Val Glu Tyr Ile		
225	230	235
Phe Ser Asp Lys Thr Gly Thr Leu Thr Gln Asn Ile Leu Thr Phe Asn		
245	250	255
Lys Cys Cys Ile Ser Gly Arg Val Tyr Gly Pro Asp Ser Glu Ala Thr		
260	265	270
Thr Arg Pro Lys Glu Asn Pro Tyr Leu Trp Asn Lys Phe Ala Asp Gly		
275	280	285
Lys Leu Leu Phe His Asn Ala Ala Leu Leu His Leu Val Arg Thr Asn		
290	295	300
Gly Asp Glu Ala Val Arg Glu Phe Trp Arg Leu Leu Ala Ile Cys His		
305	310	315
Thr Val Met Val Arg Glu Ser Pro Arg Glu Arg Pro Asp Gln Leu Leu		
325	330	335
Tyr Gln Ala Ala Ser Pro Asp Glu Gly Ala Leu Val Thr Ala Ala Arg		
340	345	350
Asn Phe Gly Tyr Val Phe Leu Ser Arg Thr Gln Asp Thr Val Thr Ile		
355	360	365
Met Glu Leu Gly Glu Glu Arg Val Tyr Gln Val Leu Ala Ile Met Asp		
370	375	380
Phe Asn Ser Thr Arg Lys Arg Met Ser Val Leu Val Arg Lys Pro Glu		

385 390 395 400
 Gly Ala Ile Cys Leu Tyr Thr Lys Gly Ala Asp Thr Val Ile Phe Glu
 405 410 415
 Arg Leu His Arg Arg Gly Ala Met Glu Phe Ala Thr Glu Glu Ala Leu
 420 425 430
 Ala Ala Phe Ala Gln Glu Thr Leu Arg Thr Leu Cys Leu Ala Tyr Arg
 435 440 445
 Glu Val Ala Glu Asp Ile Tyr Glu Asp Trp Gln Gln Arg His Gln Glu
 450 455 460
 Ala Ser Leu Leu Leu Gln Asn Arg Ala Gln Ala Leu Gln Gln Val Tyr
 465 470 475 480
 Asn Glu Met Glu Gln Asp Leu Arg Leu Leu Gly Ala Thr Ala Ile Glu
 485 490 495
 Asp Arg Leu Gln Asp Gly Val Pro Glu Thr Ile Lys Cys Leu Lys Lys
 500 505 510
 Ser Asn Ile Lys Ile Trp Val Leu Thr Gly Asp Lys Gln Glu Thr Ala
 515 520 525
 Val Asn Ile Gly Phe Ala Cys Glu Leu Leu Ser Glu Asn Met Leu Ile
 530 535 540
 Leu Glu Glu Lys Glu Ile Ser Arg Ile Leu Glu Thr Tyr Trp Glu Asn
 545 550 555 560
 Ser Asn Asn Leu Leu Thr Arg Glu Ser Leu Ser Gln Val Lys Leu Ala
 565 570 575
 Leu Val Ile Asn Gly Asp Phe Leu Ala Pro Val Pro Ala Val Pro Glu
 580 585 590
 Val Arg Ala Pro Ala Gly Cys Thr Ala Ser Pro Gly Leu Gln Ser Pro
 595 600 605
 Pro

<210> 3850

<211> 483

<212> PRT

<213> Homo sapiens

<400> 3850

Met Thr Met Lys Val Asp Met Ser Gly Leu Gln Ala Lys Asn Glu Ile
 1 5 10 15
 Leu Ser Glu Lys Leu Ser Asn Ala Glu Ser Lys Ile Asn Ser Leu Gln
 20 25 30
 Ile Gln Leu His Asn Thr Arg Asp Ala Leu Gly Arg Glu Ser Leu Ile
 35 40 45
 Leu Glu Arg Val Gln Arg Asp Leu Ser Gln Thr Gln Cys Gln Lys Lys
 50 55 60
 Glu Thr Glu Gln Met Tyr Gln Ile Glu Gln Ser Lys Leu Lys Lys Tyr
 65 70 75 80
 Ile Ala Lys Gln Glu Ser Val Glu Glu Arg Leu Ser Gln Leu Gln Ser
 85 90 95
 Glu Asn Met Leu Leu Arg Gln Gln Leu Asp Asp Ala His Lys Lys Ala
 100 105 110
 Asn Ser Gln Glu Lys Thr Ser Ser Thr Ile Gln Asp Gln Phe His Ser
 115 120 125
 Ala Ala Lys Asn Leu Arg Ala Glu Ser Glu Lys Gln Ile Leu Ser Leu
 130 135 140
 Gln Glu Lys Asn Lys Glu Leu Met Asp Glu Tyr Asn His Leu Lys Glu
 145 150 155 160
 Arg Met Asp Gln Cys Glu Lys Glu Lys Ala Gly Arg Lys Val Val Met
 165 170 175
 Arg Glu Phe Gln Gln Glu Trp Thr Asp Leu Leu Lys Gln Gln Pro Thr
 180 185 190
 Ser Glu Ala Thr Ser Arg Cys His Ile Asn Leu Asp Glu Thr Gln Asp
 195 200 205
 Ser Lys Lys Lys Leu Gly Gln Ile Arg Ser Glu Ile Asp Leu Thr Glu
 210 215 220
 Ala Gln Glu Thr Val Pro Ser Arg Cys Leu His Leu Asp Ala Glu Asn
 225 230 235 240
 Glu Val Leu Gln Leu Gln Gln Thr Leu Phe Ser Met Lys Ala Ile Gln
 245 250 255
 Lys Gln Cys Glu Thr Leu Gln Lys Asn Lys Lys Gln Leu Lys Gln Glu
 260 265 270
 Val Val Asn Leu Lys Ser Tyr Met Glu Arg Asn Met Leu Glu Arg Gly

275	280	285
Lys Ala Glu Trp His Lys Leu Leu Ile Glu Glu Arg Ala Arg Lys Glu		
290	295	300
Ile Glu Glu Lys Leu Asn Glu Ala Ile Leu Thr Leu Gln Lys Gln Ala		
305	310	315
Ala Val Ser His Glu Gln Leu Val Gln Leu Arg Glu Asp Asn Thr Thr		
325	330	335
Ser Ile Lys Thr Gln Met Glu Leu Thr Ile Lys Asp Leu Glu Ser Glu		
340	345	350
Ile Ser Arg Ile Lys Thr Ser Gln Ala Asp Phe Asn Lys Thr Glu Leu		
355	360	365
Glu Arg Tyr Lys Glu Leu Tyr Leu Glu Glu Val Lys Val Arg Glu Ser		
370	375	380
Leu Ser Asn Glu Leu Ser Arg Thr Asn Glu Met Ile Ala Glu Val Ser		
385	390	395
Thr Gln Leu Thr Val Glu Lys Glu Gln Thr Arg Ser Arg Ser Leu Phe		
405	410	415
Thr Ala Tyr Ala Thr Arg Pro Val Leu Glu Ser Pro Cys Val Gly Asn		
420	425	430
Leu Asn Asp Ser Glu Gly Leu Asn Arg Lys His Ile Pro Arg Lys Lys		
435	440	445
Arg Ser Ala Leu Lys Asp Met Glu Ser Tyr Leu Leu Lys Val Ser Tyr		
450	455	460
Leu Phe Ser Phe Gly Val Gln Ile Ser Asp Arg Thr Leu Val Cys Tyr		
465	470	475
Leu Val Lys		480

<210> 3851

<211> 365

<212> PRT

<213> Homo sapiens

<400> 3851

Met Val Arg Val Pro Ser Pro Phe Gly Pro Arg Glu Gln Ser Thr Tyr

1	5	10	15
Val Leu Val	Arg Asp Ala Glu Ala	Glu Asn Pro Gly Ala	Pro Gly Ser
20	25	30	
Pro Leu Asn	Val Arg Cys Leu Asp	Val Asn Arg Asp Cys	Leu Ile Leu
35	40	45	
Thr Trp Ala	Pro Pro Ser Asp Thr	Arg Gly Asn Pro Ile	Thr Ala Tyr
50	55	60	
Thr Ile Glu	Arg Cys Gln Gly Glu	Ser Gly Glu Trp Ile	Ala Cys His
65	70	75	80
Glu Ala Pro	Gly Gly Thr Cys Arg	Cys Pro Ile Gln Gly	Leu Val Glu
85	90	95	
Gly Gln Ser	Tyr Arg Phe Arg Val	Arg Ala Ile Ser Arg	Val Gly Ser
100	105	110	
Ser Val Pro	Ser Lys Ala Ser Glu	Leu Val Val Met Gly	Asp His Asp
115	120	125	
Ala Ala Arg	Arg Lys Thr Glu Ile	Pro Phe Asp Leu Gly	Asn Lys Ile
130	135	140	
Thr Ile Ser	Thr Asp Ala Phe Glu	Asp Thr Val Thr Ile	Pro Ser Pro
145	150	155	160
Pro Thr Asn	Val His Ala Ser Glu	Ile Arg Glu Ala Tyr	Val Val Leu
165	170	175	
Ala Trp Glu	Glu Pro Ser Pro Arg	Gly Arg Ala Pro Leu	Thr Tyr Ser
180	185	190	
Leu Glu Lys	Ser Val Ile Gly Ser	Gly Thr Trp Glu Ala	Ile Ser Ser
195	200	205	
Glu Ser Pro	Val Arg Ser Pro Arg	Phe Ala Val Leu Asp	Leu Glu Lys
210	215	220	
Lys Lys Ser	Tyr Val Phe Arg Val	Arg Ala Met Asn Gln	Tyr Gly Leu
225	230	235	240
Ser Asp Pro	Ser Glu Pro Ser Glu	Pro Ile Ala Leu Arg	Gly Pro Pro
245	250	255	
Ala Thr Leu	Pro Pro Pro Ala Gln	Val Gln Ala Phe Arg	Asp Thr Gln
260	265	270	
Thr Ser Val	Ser Leu Thr Trp Asp	Pro Val Lys Asp Pro	Glu Leu Leu
275	280	285	
Gly Tyr Tyr	Ile Tyr Ser Arg Lys	Val Gly Thr Ser Glu	Trp Gln Thr

290	295	300	
Val Asn Asn Lys Pro Ile Gln Gly Thr Arg Tyr Val Cys Pro Pro Val			
305	310	315	320
Ser Val Cys Ser His Thr Ala Ile Lys Thr Tyr Leu Arg Leu Gly Asn			
	325	330	335
Phe Phe Tyr Lys Glu Lys Arg Phe Asn Gln Leu Thr Val Leu Arg Pro			
	340	345	350
Ile Gln Ala Ser Phe Ser Gly Glu Ala Ser Gly Asn Leu			
	355	360	365

<210> 3852

<211> 566

<212> PRT

<213> Homo sapiens

<400> 3852

Met Ala Met Gly Arg Gly Glu Gly Leu Val Gly Asp Gly Pro Val Asp			
1	5	10	15
Met Arg Thr Ser His Ser Asp Met Lys Ser Glu Arg Arg Pro Pro Ser			
	20	25	30
Pro Asp Val Ile Val Leu Ser Asp Asn Glu Gln Pro Ser Ser Pro Arg			
	35	40	45
Val Asn Gly Leu Thr Thr Val Ala Leu Lys Glu Thr Ser Thr Glu Ala			
	50	55	60
Leu Met Lys Ser Ser Pro Glu Glu Arg Glu Arg Met Ile Lys Gln Leu			
65	70	75	80
Lys Glu Glu Leu Arg Leu Glu Glu Ala Lys Leu Val Leu Leu Lys Lys			
	85	90	95
Leu Arg Gln Ser Gln Ile Gln Lys Glu Ala Thr Ala Gln Lys Pro Thr			
	100	105	110
Gly Ser Val Gly Ser Thr Val Thr Thr Pro Pro Pro Leu Val Arg Gly			
	115	120	125
Thr Gln Asn Ile Pro Ala Gly Lys Pro Ser Leu Gln Thr Ser Ser Ala			
	130	135	140
Arg Met Pro Gly Ser Val Ile Pro Pro Pro Leu Val Arg Gly Gly Gln			

145	150	155	160
Gln Ala Ser Ser Lys Leu Gly Pro Gln Ala Ser Ser Gln Val Val Met			
165	170	175	
Pro Pro Leu Val Arg Gly Ala Gln Gln Ile His Ser Ile Arg Gln His			
180	185	190	
Ser Ser Thr Gly Pro Pro Pro Leu Leu Leu Ala Pro Arg Ala Ser Val			
195	200	205	
Pro Ser Val Gln Ile Gln Gly Gln Arg Ile Ile Gln Gln Gly Leu Ile			
210	215	220	
Arg Val Ala Asn Val Pro Asn Thr Ser Leu Leu Val Asn Ile Pro Gln			
225	230	235	240
Pro Thr Pro Ala Ser Leu Lys Gly Thr Thr Ala Thr Ser Ala Gln Ala			
245	250	255	
Asn Ser Thr Pro Thr Ser Val Ala Ser Val Val Thr Ser Ala Glu Ser			
260	265	270	
Pro Ala Ser Arg Gln Ala Ala Ala Lys Leu Ala Leu Arg Lys Gln Leu			
275	280	285	
Glu Lys Thr Leu Leu Glu Ile Pro Pro Pro Lys Pro Pro Ala Pro Glu			
290	295	300	
Met Asn Phe Leu Pro Ser Ala Ala Asn Asn Glu Phe Ile Tyr Leu Val			
305	310	315	320
Gly Leu Glu Glu Val Val Gln Asn Leu Leu Glu Thr Gln Ala Gly Arg			
325	330	335	
Met Ser Ala Ala Thr Val Leu Ser Arg Glu Pro Tyr Met Cys Ala Gln			
340	345	350	
Cys Lys Thr Asp Phe Thr Cys Arg Trp Arg Glu Glu Lys Ser Gly Ala			
355	360	365	
Ile Met Cys Glu Asn Cys Met Thr Thr Asn Gln Lys Lys Ala Leu Lys			
370	375	380	
Val Glu His Thr Ser Arg Leu Lys Ala Ala Phe Val Lys Ala Leu Gln			
385	390	395	400
Gln Glu Gln Glu Ile Glu Gln Arg Leu Leu Gln Gln Gly Thr Ala Pro			
405	410	415	
Ala Gln Ala Lys Ala Glu Pro Thr Ala Ala Pro His Pro Val Leu Lys			
420	425	430	
Gln Val Ile Lys Pro Arg Arg Lys Leu Ala Phe Arg Ser Gly Glu Ala			

435 440 445
 Arg Asp Trp Ser Asn Gly Ala Val Leu Gln Ala Ser Ser Gln Leu Ser
 450 455 460
 Arg Gly Ser Ala Thr Thr Pro Arg Gly Val Leu His Thr Phe Ser Pro
 465 470 475 480
 Ser Pro Lys Leu Gln Asn Ser Ala Ser Ala Thr Ala Leu Val Ser Arg
 485 490 495
 Thr Gly Arg His Ser Glu Arg Thr Val Ser Ala Gly Lys Gly Ser Ala
 500 505 510
 Thr Ser Asn Trp Lys Lys Thr Pro Leu Ser Thr Gly Gly Thr Leu Ala
 515 520 525
 Phe Val Ser Pro Ser Leu Ala Val His Lys Ser Ser Ser Ala Val Asp
 530 535 540
 Arg Gln Arg Glu Tyr Leu Leu Asp Met Ile Pro Pro Arg Ser Ile Pro
 545 550 555 560
 Gln Ser Ala Thr Trp Lys
 565

<210> 3853

<211> 357

<212> PRT

<213> Homo sapiens

<400> 3853

Met His Trp Leu Ala Ser Ala Thr Gln Thr Ser Ala Ser Ile Val Ser
 1 5 10 15
 Ser Ser Leu Leu Ser Ala Val Asp Val Ser Ser Ser Leu Thr Met Ser
 20 25 30
 Glu Tyr Phe Gln Asn Thr Ser Leu Pro Gly Thr Ala Asn Ser Arg Gln
 35 40 45
 Phe Ser Leu Pro Val Val Ser Asn Ala Ala Phe Leu Thr Gly Ser Ile
 50 55 60
 Ser Asn Phe Ser Arg Ala Ser Ala Pro Ala Ile Ser Ser Ala Trp Leu
 65 70 75 80
 Gln Pro Ser Ala Ser Gly Thr Ser Phe Gln Pro Leu Met Gly Ser Ala

				85				90				95			
Tyr	Leu	Tyr	Gln	His	Ser	Ser	Thr	Thr	Met	Leu	Ser	Gly	Val	Thr	Gly
100				105				110							
Gln	Ser	His	Ile	Cys	Thr	Ser	Ala	Ala	Ser	Tyr	Pro	Gly	Val	Phe	Glu
115				120				125							
Trp	Asp	Ser	Thr	Ala	Ser	Thr	Val	Lys	Lys	Ser	Ser	Ser	Leu	Arg	Asp
130				135				140							
Phe	Thr	Val	Thr	Val	Ile	Asp	Gln	Asn	Thr	Ala	Val	Ser	Ser	Met	Ser
145				150				155				160			
Met	Thr	Ala	Gln	Tyr	Tyr	Lys	Thr	Ser	Asp	Thr	Asn	Thr	Met	Val	Pro
165				170				175							
Leu	Tyr	Pro	Ser	Leu	Ser	Ala	Ser	Leu	Val	Gln	Gly	Thr	Leu	Thr	Gln
180				185				190							
Ile	Pro	Asn	Gln	Gln	Gly	His	Asn	Leu	Ser	Leu	Pro	Cys	Gln	Ile	Gly
195				200				205							
Ser	Gln	Val	Tyr	Tyr	Tyr	Asn	Gln	Gly	Thr	Leu	Gly	Pro	Gln	Leu	Ser
210				215				220							
Cys	Leu	Gln	Ser	Tyr	Gly	Ser	Val	Ser	Tyr	Thr	Gly	Tyr	Arg	Ala	Ser
225				230				235				240			
Ala	His	Gln	Pro	Glu	Met	Val	Met	Val	Leu	Lys	Glu	Val	Gln	Pro	Thr
245				250				255							
Asn	Val	Leu	Pro	Pro	Val	Ser	Thr	Ser	Gly	Met	Tyr	Tyr	Ser	Val	Ser
260				265				270							
Ser	Gln	Pro	Ile	Thr	Glu	Thr	Ser	Val	Gln	Val	Met	Glu	Thr	Ser	Leu
275				280				285							
Gly	Met	Asp	Thr	Ser	Leu	Gly	Leu	Gln	Ser	Pro	Ser	Gln	Thr	Phe	Cys
290				295				300							
Leu	Pro	Gln	Thr	Pro	Glu	Phe	Ser	Lys	Ser	Phe	Ser	Ser	Arg	Asn	Thr
305				310				315				320			
Gln	Thr	Leu	Glu	Ser	Asn	Pro	Ser	Pro	Glu	Leu	Gly	Asp	Ile	Ser	Ile
325				330				335							
Thr	Pro	Val	Gln	Ser	Pro	Thr	Asn	Leu	Leu	Thr	Leu	Ser	Pro	Ala	Pro
340				345				350							
Ser	Gln	Glu	Lys	Lys											
355															

<210> 3854

<211> 123

<212> PRT

<213> Homo sapiens

<400> 3854

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Met Gln Gly Gly Glu Ala Glu Gly Gly Trp Gly Leu Glu Ser Gly Leu
 1             5             10             15
Ser Pro Arg Pro Leu Leu Gln Ala Gly Asp Leu Gly Gln Val Ser Ser
          20             25             30
Pro Leu Cys Gly Ala Gly Gly Ala Phe Ser Arg Leu Gly Gly Ser Ser
      35             40             45
Gly Thr Gly Pro Glu Thr Gly Asp Leu Leu Ser Pro Ser Leu Ser His
      50             55             60
Ser Leu His Leu Ser Pro Arg Leu Thr Pro Thr His Ser Ile Ser His
      65             70             75             80
Ser Leu Ser Phe Ser His Arg Leu Thr Pro Cys Leu Ile Cys Ser Leu
          85             90             95
Thr His Ser Phe Leu Ser Pro Ser Leu Ser Leu Cys Leu Ser Leu Pro
          100             105             110
Leu Arg Leu Val His Thr Leu Thr Asn Gly Ala
          115             120

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<210> 3855

<211> 906

<212> PRT

<213> Homo sapiens

<400> 3855

```

Met Ser Ala Thr Ile Ser Cys Lys Glu Phe Ala Asp Tyr Phe Ala Val
 1             5             10             15
Pro Val Gln Asn Lys Met Asn Pro Ala Tyr Ile Phe Glu Val Glu Gly
          20             25             30

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Lys Pro His Ser Val Glu Glu Tyr Tyr Leu Asn Asp Leu Glu His Ile
 35 40 45
 His His Ser Lys Leu Ser Pro His Leu Leu Glu Glu Pro Val Ile Thr
 50 55 60
 Lys Asp Ile Tyr Glu Val Ala Val Ser Leu Ile Gln Met Phe Asp Asp
 65 70 75 80
 Leu Asp Met Lys Glu Ser Gly Asn Lys Ala Trp Ser Gly Ala Gln Phe
 85 90 95
 Val Leu Glu Arg Ser Ser Val Leu Val Phe Leu Pro Gly Leu Gly Glu
 100 105 110
 Ile Asn Tyr Met His Glu Leu Leu Thr Ser Leu Val His Lys Arg Leu
 115 120 125
 Gln Val Tyr Pro Leu His Ser Ser Val Ala Leu Glu Glu Gln Asn Asn
 130 135 140
 Val Phe Leu Ser Pro Val Pro Gly Tyr Arg Lys Ile Ile Leu Ser Thr
 145 150 155 160
 Asn Ile Ala Glu Ser Ser Val Thr Val Pro Asp Val Lys Tyr Val Ile
 165 170 175
 Asp Phe Cys Leu Thr Arg Thr Leu Val Cys Asp Glu Asp Thr Asn Tyr
 180 185 190
 Gln Ser Leu Arg Leu Ser Trp Ala Ser Lys Thr Ser Cys Asn Gln Arg
 195 200 205
 Lys Gly Arg Ala Gly Arg Val Ser Arg Gly Tyr Cys Tyr Arg Leu Val
 210 215 220
 His Lys Asp Phe Trp Asp Asn Ser Ile Pro Asp His Val Val Pro Glu
 225 230 235 240
 Met Leu Arg Cys Pro Leu Gly Ser Thr Ile Leu Lys Val Lys Leu Leu
 245 250 255
 Asp Met Gly Glu Pro Arg Ala Leu Leu Ala Thr Ala Leu Ser Pro Pro
 260 265 270
 Gly Leu Ser Asp Ile Glu Arg Thr Ile Leu Leu Leu Lys Glu Val Gly
 275 280 285
 Ala Leu Ala Val Ser Gly Gln Arg Glu Asp Glu Asn Pro His Asp Gly
 290 295 300
 Glu Leu Thr Phe Leu Gly Arg Val Leu Ala Gln Leu Pro Val Asn Gln
 305 310 315 320

Gln Leu Gly Lys Leu Ile Val Leu Gly His Val Phe Gly Cys Leu Asp
 325 330 335
 Glu Cys Leu Ile Ile Ala Ala Ala Leu Ser Leu Lys Asn Phe Phe Ala
 340 345 350
 Met Pro Phe Arg Gln His Leu Asp Gly Tyr Arg Asn Lys Val Asn Phe
 355 360 365
 Ser Gly Ser Ser Lys Ser Asp Cys Ile Ala Leu Val Glu Ala Phe Lys
 370 375 380
 Thr Trp Lys Ala Cys Arg Gln Thr Gly Glu Leu Arg Tyr Pro Lys Asp
 385 390 395 400
 Glu Leu Asn Trp Gly Arg Leu Asn Tyr Ile Gln Ile Lys Arg Ile Arg
 405 410 415
 Glu Val Ala Glu Leu Tyr Glu Glu Leu Lys Thr Arg Ile Ser Gln Phe
 420 425 430
 Asn Met His Val Asp Ser Arg Arg Pro Val Met Asp Gln Glu Tyr Ile
 435 440 445
 Tyr Lys Gln Arg Phe Ile Leu Gln Val Val Leu Ala Gly Ala Phe Tyr
 450 455 460
 Pro Asn Tyr Phe Thr Phe Gly Gln Pro Asp Glu Glu Met Ala Val Arg
 465 470 475 480
 Glu Leu Ala Gly Lys Asp Pro Lys Thr Thr Val Val Leu Lys His Ile
 485 490 495
 Pro Pro Tyr Gly Phe Leu Tyr Tyr Lys Gln Leu Gln Ser Leu Phe Arg
 500 505 510
 Gln Cys Gly Gln Val Lys Ser Ile Val Phe Asp Gly Ala Lys Ala Phe
 515 520 525
 Val Glu Phe Ser Arg Asn Pro Thr Glu Arg Phe Lys Thr Leu Pro Ala
 530 535 540
 Val Tyr Met Ala Ile Lys Met Ser Gln Leu Lys Val Ser Leu Glu Leu
 545 550 555 560
 Ser Val His Ser Ala Glu Glu Ile Glu Gly Lys Val Gln Gly Met Asn
 565 570 575
 Val Ser Lys Leu Arg Asn Thr Arg Val Asn Val Asp Phe Gln Lys Gln
 580 585 590
 Thr Val Asp Pro Met Gln Val Ser Phe Asn Thr Ser Asp Arg Ser Gln
 595 600 605

Thr Val Thr Asp Leu Leu Leu Thr Ile Asp Val Thr Glu Val Val Glu
 610 615 620
 Val Gly His Phe Trp Gly Tyr Arg Ile Asp Glu Asn Asn Ser Glu Ile
 625 630 635 640
 Leu Lys Lys Leu Thr Ala Glu Ile Asn Gln Leu Thr Leu Val Pro Leu
 645 650 655
 Pro Thr His Pro His Pro Asp Leu Val Cys Leu Ala Pro Phe Ala Asp
 660 665 670
 Phe Asp Lys Gln Arg Tyr Phe Arg Ala Gln Val Leu Tyr Val Ser Gly
 675 680 685
 Asn Ser Ala Glu Val Phe Phe Val Asp Tyr Gly Asn Lys Ser His Val
 690 695 700
 Asp Leu His Leu Leu Met Glu Ile Pro Cys Gln Phe Leu Glu Leu Pro
 705 710 715 720
 Phe Gln Ala Leu Glu Phe Lys Ile Cys Lys Met Arg Pro Ser Ala Lys
 725 730 735
 Ser Leu Val Cys Gly Lys His Trp Ser Asp Gly Ala Ser Gln Trp Phe
 740 745 750
 Ala Ser Leu Val Ser Gly Cys Thr Leu Leu Val Lys Val Phe Ser Val
 755 760 765
 Val His Ser Val Leu His Val Asp Val Tyr Gln Tyr Ser Gly Val Gln
 770 775 780
 Asp Ala Ile Asn Ile Arg Asp Val Leu Ile Gln Gln Gly Tyr Ala Glu
 785 790 795 800
 Leu Thr Glu Glu Ser Tyr Glu Ser Lys Val Asn Ile Leu Arg Ala Ala
 805 810 815
 Ile Asn Lys Leu Val Cys Asp Gly Pro Asn Gly Cys Lys Cys Leu Gly
 820 825 830
 Pro Glu Arg Val Ala Gln Leu Gln Asp Ile Ala Arg Gln Lys Leu Leu
 835 840 845
 Gly Leu Phe Cys Gln Ser Lys Pro Arg Glu Lys Ile Val Pro Lys Trp
 850 855 860
 His Glu Lys Pro Tyr Glu Trp Asn Gln Val Asp Pro Lys Leu Val Met
 865 870 875 880
 Glu Gln Ala Asp Arg Glu Ser Ser Arg Gly Lys Asn Thr Phe Leu Tyr
 885 890 895

Gln Leu His Lys Leu Val Val Leu Gly Thr
 900 905

<210> 3856

<211> 738

<212> PRT

<213> Homo sapiens

<400> 3856

Met Leu Lys Trp Ile Ser Trp Arg Gln Ser Lys Ala Asn Lys Ala Gln
 1 5 10 15
 Leu Ser Gly Gly Cys Glu Leu Thr Val Val Leu Gln Asp Phe Ser Ala
 20 25 30
 Gly His Ser Ser Glu Leu Thr Ile Gln Val Gly Gln Thr Val Glu Leu
 35 40 45
 Leu Glu Arg Pro Ser Glu Arg Pro Gly Trp Cys Leu Val Arg Thr Thr
 50 55 60
 Glu Arg Ser Pro Pro Leu Glu Gly Leu Val Pro Ser Ser Ala Leu Cys
 65 70 75 80
 Ile Ser His Ser Arg Ser Ser Val Glu Met Asp Cys Phe Phe Pro Leu
 85 90 95
 Val Lys Asp Ala Tyr Ser His Ser Ser Ser Glu Asn Gly Gly Lys Ser
 100 105 110
 Glu Ser Val Ala Asn Leu Gln Ala Gln Pro Ser Leu Asn Ser Ile His
 115 120 125
 Ser Ser Pro Gly Pro Lys Arg Ser Thr Asn Thr Leu Lys Lys Trp Leu
 130 135 140
 Thr Ser Pro Val Arg Arg Leu Asn Ser Gly Lys Ala Asp Gly Asn Ile
 145 150 155 160
 Lys Lys Gln Lys Lys Val Arg Asp Gly Arg Lys Ser Phe Asp Leu Gly
 165 170 175
 Ser Pro Lys Pro Gly Asp Glu Thr Thr Pro Gln Gly Asp Ser Ala Asp
 180 185 190
 Glu Lys Ser Lys Lys Gly Trp Gly Glu Asp Glu Pro Asp Glu Glu Ser
 195 200 205

His Thr Pro Leu Pro Pro Pro Met Lys Ile Phe Asp Asn Asp Pro Thr
 210 215 220
 Gln Asp Glu Met Ser Leu Glu Gly Ser Ser Tyr Arg Gly Ser Leu Lys
 225 230 235 240
 Asp Pro Ala Gly Cys Leu Asn Glu Gly Met Ala Pro Pro Thr Pro Pro
 245 250 255
 Lys Asn Pro Glu Glu Glu Gln Lys Ala Lys Ala Leu Arg Gly Arg Met
 260 265 270
 Phe Val Leu Asn Glu Leu Val Gln Thr Glu Lys Asp Tyr Val Lys Asp
 275 280 285
 Leu Gly Ile Val Val Glu Gly Phe Met Lys Arg Ile Glu Glu Lys Gly
 290 295 300
 Val Pro Glu Asp Met Arg Gly Lys Asp Lys Ile Val Phe Gly Asn Ile
 305 310 315 320
 His Gln Ile Tyr Asp Trp His Lys Asp Phe Phe Leu Ala Glu Leu Glu
 325 330 335
 Lys Cys Ile Gln Glu Gln Asp Arg Leu Ala Gln Leu Phe Ile Lys His
 340 345 350
 Glu Arg Lys Leu His Ile Tyr Val Trp Tyr Cys Gln Asn Lys Pro Arg
 355 360 365
 Ser Glu Tyr Ile Val Ala Glu Tyr Asp Ala Tyr Phe Glu Glu Val Lys
 370 375 380
 Gln Glu Ile Asn Gln Arg Leu Thr Leu Ser Asp Phe Leu Ile Lys Pro
 385 390 395 400
 Ile Gln Arg Ile Thr Lys Tyr Gln Leu Leu Leu Lys Asp Phe Leu Arg
 405 410 415
 Tyr Ser Glu Lys Ala Gly Leu Glu Cys Ser Asp Ile Glu Lys Ala Val
 420 425 430
 Glu Leu Met Cys Leu Val Pro Lys Arg Cys Asn Asp Met Met Asn Leu
 435 440 445
 Gly Arg Leu Gln Gly Phe Glu Gly Thr Leu Thr Ala Gln Gly Lys Leu
 450 455 460
 Leu Gln Gln Asp Thr Phe Tyr Val Ile Glu Leu Asp Ala Gly Met Gln
 465 470 475 480
 Ser Arg Thr Lys Glu Arg Arg Val Phe Leu Phe Glu Gln Ile Val Ile

	485		490		495
Phe	Ser	Glu	Leu	Leu	Arg
			Lys	Gly	Ser
			Leu	Thr	Pro
				Gly	Tyr
				Met	Phe
	500		505		510
Lys	Arg	Ser	Ile	Lys	Met
			Asn	Tyr	Leu
			Val	Leu	Glu
				Glu	Asn
				Val	Asp
	515		520		525
Asn	Asp	Pro	Cys	Lys	Phe
			Ala	Leu	Met
			Asn	Arg	Glu
				Thr	Ser
				Glu	Arg
	530		535		540
Val	Val	Leu	Gln	Ala	Ala
			Asn	Ala	Asp
			Ile	Gln	Gln
				Ala	Trp
				Val	Gln
545			550		555
					560
Asp	Ile	Asn	Gln	Val	Leu
			Glu	Thr	Gln
			Arg	Asp	Phe
				Leu	Asn
				Ala	Leu
	565		570		575
Gln	Ser	Pro	Ile	Glu	Tyr
			Gln	Arg	Lys
			Glu	Arg	Ser
			Thr	Ala	Val
				Met	
	580		585		590
Arg	Ser	Gln	Pro	Ala	Arg
			Leu	Pro	Gln
			Ala	Ser	Pro
				Arg	Pro
				Tyr	Ser
	595		600		605
Ser	Val	Pro	Ala	Gly	Ser
			Glu	Lys	Pro
			Pro	Lys	Gly
				Ser	Ser
				Tyr	Asn
	610		615		620
Pro	Pro	Leu	Pro	Pro	Leu
			Lys	Ile	Ser
			Thr	Ser	Asn
				Gly	Ser
				Pro	Gly
625			630		635
					640
Phe	Glu	Tyr	His	Gln	Pro
			Gly	Asp	Lys
			Phe	Glu	Ala
				Ser	Lys
				Asn	Asp
	645		650		655
Leu	Gly	Gly	Cys	Asn	Gly
			Thr	Ser	Ser
			Met	Ala	Val
				Ile	Lys
				Asp	Tyr
	660		665		670
Tyr	Ala	Leu	Lys	Glu	Asn
			Glu	Ile	Cys
			Val	Ser	Gln
				Gly	Glu
				Val	Val
	675		680		685
Gln	Val	Leu	Ala	Val	Asn
			Gln	Gln	Asn
			Met	Cys	Leu
				Val	Tyr
				Gln	Pro
	690		695		700
Ala	Ser	Asp	His	Ser	Pro
			Ala	Ala	Glu
			Gly	Trp	Val
				Pro	Gly
				Ser	Ile
705			710		715
					720
Leu	Ala	Pro	Leu	Thr	Lys
			Ala	Thr	Ala
			Ala	Ala	Glu
				Ser	Ser
				Asp	Gly
				Ser	
	725		730		735
Ile	Lys				

<211> 114

<212> PRT

<213> Homo sapiens

<400> 3857

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Met Lys Pro Ser Val Thr Val Leu Phe Pro Thr Phe Gln Leu Met Phe
  1                   5                   10                   15
His Val Asp Asn Gly Ala Gly Arg Phe Thr Ala Val Tyr Asp Ala Gly
      20                   25                   30
Val Pro Gly His Leu Cys Asp Gly Gln Trp His Lys Val Thr Ala Asn
      35                   40                   45
Lys Ile Lys His Arg Ile Glu Leu Thr Val Asp Gly Asn Gln Val Glu
      50                   55                   60
Ala Gln Ser Pro Asn Pro Ala Ser Thr Ser Ala Asp Thr Asn Asp Pro
      65                   70                   75                   80
Val Phe Val Gly Gly Phe Pro Gly Glu Cys Trp Leu Pro Gln Gln Gln
      85                   90                   95
Phe Leu Cys Ser Leu Met Leu Leu Val Leu Lys Thr Phe Ile Phe Thr
      100                   105                   110
Cys Val

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<210> 3858

<211> 143

<212> PRT

<213> Homo sapiens

<400> 3858

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Met Ser Ala Leu Val Cys Leu Leu Pro Leu Cys Leu Gln Pro Ile Ser
  1                   5                   10                   15
Val Leu Phe Leu Asp His Phe Ser Arg Glu Thr Val Pro Lys Thr Pro
      20                   25                   30
Ile Pro Ser Val Cys Thr Cys Ser Gln Ser Ile Ser Leu Ser Ile Ser
      35                   40                   45
Val Cys Cys Tyr Cys Ser Arg Gly Val Ser Leu Ser Val Pro Ala Ser

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50	55	60
His Ala Cys Leu Pro Val Ser Pro Ala Leu Val His Ala Ala His Ile		
65	70	75
Arg Thr Leu Val Thr Pro Pro Phe Ser Leu Gln Pro His Leu Pro Ser		
85	90	95
Gly Ile Phe Ile Ser Val Pro Pro Ala His Ala Asn Leu His Leu Leu		
100	105	110
Leu Tyr Pro Ala Pro Leu Pro Val Ser Val Pro Gly Val Pro Leu Cys		
115	120	125
His Ala Ala Val Ala Ser Glu Leu Pro Phe Cys Leu Asp Pro Leu		
130	135	140

<210> 3859

<211> 128

<212> PRT

<213> Homo sapiens

<400> 3859

Met Gln Asp Pro Glu Gly Ser Lys Glu Ser Thr Val Arg Arg Lys Ser		
1	5	10
Thr Val Arg Gln Leu Ser Phe Arg Asp Val Val Leu Arg Cys Arg Pro		
20	25	30
His Pro Gln Val His Pro Gly Ser Gln Pro Ser Glu Gly Thr Met Glu		
35	40	45
Ile Gln Leu Leu Thr Leu Gly Ser Arg Arg Ile Pro Asp His Ser Cys		
50	55	60
Val His Pro Gly Arg Glu Pro Ser Glu Gly Thr Val Glu Ile Gln Leu		
65	70	75
Leu Thr Leu Ala Ser Ile Arg Ile Pro Asp Ser Ser Gly Ser Gln Thr		
85	90	95
Ser Asp Asn Ser Lys Ile Ala Thr Leu Tyr Ser Ser Leu Phe His Val		
100	105	110
Cys Gln Phe Lys Cys Thr Ser Gln Ser Leu Val Leu Gln Met Gln Lys		
115	120	125

<210> 3860

<211> 694

<212> PRT

<213> Homo sapiens

<400> 3860

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Met Asp Leu His Lys Gln Trp Glu Asn Thr Glu Thr Asn Trp His Lys
  1             5             10             15
Glu Lys Met Glu Leu Leu Asp Gln Phe Asp Asn Glu Arg Lys Glu Trp
      20             25             30
Glu Ser Gln Trp Lys Ile Met Gln Lys Lys Ile Glu Glu Leu Cys Arg
      35             40             45
Glu Val Lys Leu Trp Arg Lys Ile Asn Ile Asn Glu Ser Ala Lys Ile
      50             55             60
Ile Asp Leu Tyr His Glu Lys Thr Ile Pro Glu Lys Val Ile Glu Ser
      65             70             75             80
Ser Pro Asn Tyr Pro Asp Leu Gly Gln Ser Glu Phe Ile Arg Thr Asn
      85             90             95
His Lys Asp Gly Leu Arg Lys Glu Asn Lys Arg Glu Gln Ser Leu Val
      100            105            110
Ser Gly Gly Asn Gln Met Cys Lys Glu Gln Lys Ala Thr Lys Lys Ser
      115            120            125
Lys Val Gly Phe Leu Asp Pro Leu Ala Thr Asp Asn Gln Lys Glu Cys
      130            135            140
Glu Ala Trp Pro Asp Leu Arg Thr Ser Glu Glu Asp Ser Lys Ser Cys
      145            150            155            160
Ser Gly Ala Leu Ser Thr Ala Leu Glu Glu Leu Ala Lys Val Ser Glu
      165            170            175
Glu Leu Cys Ser Phe Gln Glu Glu Ile Arg Lys Arg Ser Asn His Arg
      180            185            190
Arg Met Lys Ser Asp Ser Phe Leu Gln Glu Met Pro Asn Val Thr Asn
      195            200            205
Ile Pro His Gly Asp Pro Met Ile Asn Asn Asp Gln Cys Ile Leu Pro
      210            215            220
Ile Ser Leu Glu Lys Glu Lys Gln Lys Asn Arg Lys Asn Leu Ser Cys

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225	230	235	240
Thr Asn Val	Leu Gln Ser Asn Ser Thr	Lys Lys Cys Gly	Ile Asp Thr
245	250	255	
Ile Asp Leu	Lys Arg Asn Glu Thr Pro Pro	Val Pro Pro	Arg Ser
260	265	270	
Thr Ser Arg	Asn Phe Pro Ser Ser Asp Ser	Glu Gln Ala Tyr	Glu Arg
275	280	285	
Trp Lys Glu	Arg Leu Asp His Asn Ser Trp	Val Pro His	Glu Gly Arg
290	295	300	
Ser Lys Arg	Asn Tyr Asn Pro His Phe Pro	Leu Arg Gln Gln	Glu Met
305	310	315	320
Ser Met Leu	Tyr Pro Asn Glu Gly Lys Thr	Ser Lys Asp Gly	Ile Ile
325	330	335	
Phe Ser Ser	Leu Val Pro Glu Val Lys Ile	Asp Ser Lys Pro	Pro Ser
340	345	350	
Asn Glu Asp	Val Gly Leu Ser Met Trp Ser	Cys Asp Ile Gly	Ile Gly
355	360	365	
Ala Lys Arg	Ser Pro Ser Thr Ser Trp Phe	Gln Lys Thr Cys	Ser Thr
370	375	380	
Pro Ser Asn	Pro Lys Tyr Glu Met Val Ile	Pro Asp His Pro	Ala Lys
385	390	395	400
Ser His Pro	Asp Leu His Val Ser Asn Asp	Cys Ser Ser Ser	Val Ala
405	410	415	
Glu Ser Ser	Ser Pro Leu Arg Asn Phe Ser	Cys Gly Phe Glu	Arg Thr
420	425	430	
Thr Arg Asn	Glu Lys Leu Ala Ala Lys Thr	Asp Glu Phe Asn	Arg Thr
435	440	445	
Val Phe Arg	Thr Asp Arg Asn Cys Gln Ala	Ile Gln Gln Asn	His Ser
450	455	460	
Cys Ser Lys	Ser Ser Glu Asp Leu Lys Pro	Cys Asp Thr Ser	Ser Thr
465	470	475	480
His Thr Gly	Ser Ile Ser Gln Ser Asn Asp	Val Ser Gly Ile	Trp Lys
485	490	495	
Thr Asn Ala	His Met Pro Val Pro Met Glu	Asn Val Pro Asp	Asn Pro
500	505	510	
Thr Lys Lys	Ser Thr Thr Gly Leu Val Arg	Gln Met Gln Gly	His Leu

515	520	525
Ser Pro Arg Ser Tyr Arg Asn Met Leu His Glu His Asp Trp Arg Pro		
530	535	540
Ser Asn Leu Ser Gly Arg Pro Arg Ser Ala Asp Pro Arg Ser Asn Tyr		
545	550	555
Gly Val Val Glu Lys Leu Leu Lys Thr Tyr Glu Thr Ala Thr Glu Ser		
565	570	575
Ala Leu Gln Asn Ser Lys Cys Phe Gln Asp Asn Trp Thr Lys Cys Asn		
580	585	590
Ser Asp Val Ser Gly Gly Ala Thr Leu Ser Gln His Leu Glu Met Leu		
595	600	605
Gln Met Glu Gln Gln Phe Gln Gln Lys Thr Ala Val Trp Gly Gly Gln		
610	615	620
Glu Val Lys Gln Gly Ile Asp Pro Lys Lys Ile Thr Glu Glu Ser Met		
625	630	635
Ser Val Asn Ala Ser His Gly Lys Gly Phe Ser Arg Pro Ala Arg Pro		
645	650	655
Ala Asn Arg Arg Leu Pro Ser Arg Trp Ala Ser Arg Ser Pro Ser Ala		
660	665	670
Pro Pro Ala Leu Arg Arg Thr Thr His Asn Tyr Thr Ile Ser Leu Arg		
675	680	685
Ser Glu Ala Leu Met Val		
690		

<210> 3861

<211> 1082

<212> PRT

<213> Homo sapiens

<400> 3861

Met Asp Thr Ser Ser Ser Ala His Pro His Leu Pro Ser Leu Lys Ala
1 5 10 15
Glu Glu Ser Gln Met Lys Thr Gln Val Ile Thr His Arg Glu Asn Ser
20 25 30
Arg Leu Ile Met Gln Lys Gln Lys Lys Glu Leu Glu Ala Ser Asn Ala

35	40	45
Lys Gln Ser Ile Gln Leu Gln Lys Leu Phe Gln Arg Asn Val Leu Asp		
50	55	60
Ser Phe Tyr Ser Tyr Val Pro Leu Ser Pro Lys Arg Lys Asp Gln Lys		
65	70	75
Gly Arg Leu Thr Ile Arg Asp Leu Lys Arg Glu Leu Ser Thr Lys Tyr		
85	90	95
Leu Thr Met Lys Ile Gln Asn His Pro Ile Pro Gln Met Leu Asn Ile		
100	105	110
Thr Gly Arg Gly Thr Pro Ser Asn Arg Lys Lys Leu Glu Tyr Asp Val		
115	120	125
Lys Leu Lys Asn Ile Ala Ser Trp Ser Lys Asp Val Ser Gly Ile Phe		
130	135	140
Ile Arg Ser Leu Ser Ile Ser Ile Met Arg Ser Pro His Thr Asp Pro		
145	150	155
Lys Thr Asn Leu Glu Arg Glu Lys Arg Ile Cys Leu Pro Lys Phe Gln		
165	170	175
Glu Lys Ser Pro Asn Thr Ser Glu Met Ser Lys Arg Asp Thr Leu Thr		
180	185	190
Ile Val Lys Gly Glu Gln Asn Phe Thr Asn Thr Val Pro Gln Asp Pro		
195	200	205
Gln Pro Phe Ala Val Asp Lys Gln Gln Met Gln Lys Leu Pro Asn Val		
210	215	220
Lys Ser Glu Ala Asn Leu Arg Ser Glu Met Asn Lys Lys Tyr Leu Lys		
225	230	235
Ala Gln Thr Lys Glu Arg Ile Val Pro Glu His Asp Val Ser Arg Ile		
245	250	255
Ile Lys Lys Pro Asp Leu Arg Ile Ile Glu Gln Glu Glu Lys Ile Leu		
260	265	270
Lys Arg Ile Leu Thr Pro Thr Glu Cys Pro Ser Met Leu Glu Asp Pro		
275	280	285
Lys Leu Pro Lys Gln Arg Asp Gln Ser Glu Pro Val Trp Asp Met Thr		
290	295	300
Thr Gln Lys Val Gln Gln Gln Lys Ala Phe Pro Gly Thr Val Pro Ile		
305	310	315
Pro Pro Gln Val Lys Ser Ser Glu Val Lys Ile Val Ala Asp Ser Thr		

	325		330		335										
Asn	Ala	Glu	His	Leu	Leu	Pro	Ile	Cys	Glu	Ala	Thr	Lys	Ala	Ile	Ser
	340							345						350	
Glu	Ser	Gln	Val	Lys	Asn	Met	Ile	Gln	Asp	Lys	Val	Ser	Ser	Asp	Lys
	355							360						365	
Leu	Asp	Asn	Ile	Gln	Ala	Tyr	Lys	Pro	Asp	Asp	Leu	Lys	Ser	Pro	Pro
	370							375						380	
Phe	Pro	Glu	Gly	Pro	Asp	Thr	Ile	Ser	Thr	Ala	Ile	Tyr	Pro	Lys	Thr
385					390						395				400
Gln	His	Lys	Ser	Leu	Leu	Glu	Gln	Phe	Thr	Pro	Lys	Glu	Lys	Asn	Lys
				405					410					415	
Leu	Thr	Ser	His	Leu	Glu	Ser	Lys	Ala	Leu	Glu	Ile	Gln	Leu	Asn	Leu
				420					425					430	
Ile	Pro	Glu	Met	Ala	Arg	Lys	Ser	Leu	Gln	Met	Phe	Asn	Phe	Tyr	Pro
	435							440						445	
Lys	Gly	Thr	Ile	Ser	Lys	Asp	Asn	Ser	Trp	Arg	Phe	Tyr	Ser	Arg	His
	450							455						460	
Lys	Thr	Met	Asn	Phe	Met	Ser	Leu	Glu	Gly	Thr	Asp	Thr	Ile	Glu	Pro
465					470					475					480
Asn	Ser	Lys	His	Lys	His	Gln	Lys	Asp	Ser	Pro	Leu	Ala	Ser	Asn	Met
				485					490					495	
Lys	Thr	Leu	Ile	Val	Asp	Val	Ser	Ser	Asp	Ser	Glu	Glu	Thr	Ile	Thr
				500					505					510	
Lys	Leu	Gln	Ser	Ile	Asn	Lys	Leu	Glu	Asn	Gly	Thr	Ser	Ala	Val	Thr
	515							520						525	
Ser	Ala	Ser	Glu	Met	Leu	Leu	Pro	His	Thr	Leu	Gln	Asn	His	Ser	Val
	530						535							540	
Glu	Glu	Lys	Gly	Lys	Leu	Leu	Met	His	Phe	Ser	Val	Lys	Thr	Leu	Glu
545					550					555					560
Ile	Gln	Met	Lys	Ala	Phe	Pro	Arg	Ile	Val	Arg	Glu	Ser	Tyr	Ala	Met
				565						570					575
Thr	Ser	Ala	His	Glu	Arg	Lys	Lys	Pro	Leu	Ser	Asn	Cys	Ile	His	Pro
				580					585					590	
Gly	Phe	Thr	Gly	Pro	Lys	Arg	Gln	Asn	Arg	Ile	Leu	Leu	Leu	Ser	Glu
	595						600							605	
Glu	Lys	Ser	Leu	His	Gln	Ile	Asp	Leu	Asp	Leu	Gln	Tyr	Lys	Tyr	Leu

610	615	620	
Arg Phe Pro Leu Gly	Leu Pro Val Gly Ser Thr Phe Pro Lys Pro Asn		
625	630	635	640
Val Leu Pro Lys His Ser Lys Leu Asn Thr Ile Ala Val Cys Lys Asn			
645	650	655	
Val Asn Ala Gly Gly Gln Ser Gly Ser Leu Ser Ile Asp Thr Glu Leu			
660	665	670	
Leu Glu Gln His Ile Ser Phe Lys Lys Gln Ser Pro His Glu Asn Ser			
675	680	685	
Ser Leu Ile Arg Lys Phe Pro Gln Pro Thr Leu Val Cys Ala Ser Asp			
690	695	700	
Arg Asp Leu His Ser Pro Arg Lys Lys Asp Thr Gln Val Leu Ser Glu			
705	710	715	720
Ser Glu Phe His Val Thr Pro Glu Lys Asn Lys Gln Tyr His Val Trp			
725	730	735	
Phe Gln Glu Arg Asn Thr Cys Glu Ser Val Asp Leu Arg Thr Gln Arg			
740	745	750	
Asn Ala Thr Gly Ser Ala Val Ser Cys Glu Thr Gln Ile Ser Glu Asp			
755	760	765	
Phe Val Asp Ile Gln Thr Asp Ile Glu Ser Pro Ala Asp Leu Asp Glu			
770	775	780	
Cys Ser Cys Leu Glu Val Ser Glu Ser Glu Glu Cys Val Phe Leu Glu			
785	790	795	800
Ala Asn Ser Tyr Leu Ser Gln Glu Ser Glu Asn Ile Leu Phe Glu Leu			
805	810	815	
Gln Thr Gly Ile Pro Leu Glu Asn Val Tyr Lys Ile Thr Thr Asp Leu			
820	825	830	
Lys Ser Phe Tyr Ser Glu Asp Ser Gly Ser His Cys Thr Arg Glu Cys			
835	840	845	
Arg Lys Glu Thr Leu Ile Ile Thr Pro Pro Ser Cys Lys Ser His Lys			
850	855	860	
Ser Ser Lys Tyr Arg Ser Ser Ser Lys Met Lys Ser Pro Asp Trp Leu			
865	870	875	880
Cys His Ser Ser Ser Asn Thr Ala Glu Ile Gln Ser Arg Ser Ser Ser			
885	890	895	

Val Ser Phe Ser Glu Glu Lys Ile Ser Trp Thr Thr Asn Ser Arg Thr
 900 905 910
 Ser Tyr Ser Ser Ala Pro Leu Thr Glu Ser Asn Ile Lys Ser His Leu
 915 920 925
 Ala Lys Asn Gln Gly Lys Ser His Arg His Pro Glu Ser Gln Glu Arg
 930 935 940
 Lys Lys Ala Arg Ser Asp Leu Phe Arg Lys Asn Ser Ser His Trp Asp
 945 950 955 960
 His Asp Tyr Ser Cys Thr His Ser Lys Gly Lys Arg Asp Arg Lys Lys
 965 970 975
 Arg Val Tyr Asp Tyr Glu Ser Glu Arg Leu Asp Cys Phe Gln Ser Lys
 980 985 990
 His Lys Ser Ala Ser Lys Pro His His Asp Asp Ile Asn Phe Tyr Ser
 995 1000 1005
 Glu Arg Lys Gln Asn Arg Pro Phe Phe Phe Ala Cys Val Pro Ala Asp
 1010 1015 1020
 Ser Leu Glu Val Ile Pro Lys Thr Ile Arg Trp Thr Ile Pro Pro Glu
 1025 1030 1035 1040
 Thr Leu Arg Lys Arg Asn Phe Arg Ile Pro Leu Val Ala Lys Ile Ser
 1045 1050 1055
 Ser Ser Trp Asn Ile Trp Ser Ser Ser Lys Lys Leu Leu Gly Ser Leu
 1060 1065 1070
 Ser Gly Ser Leu Thr Thr Val Phe His Ser
 1075 1080

<210> 3862

<211> 151

<212> PRT

<213> Homo sapiens

<400> 3862

Met Ser Ser Thr Lys Asn Thr Ser Gln Ser Ile Arg Glu Lys Phe Arg
 1 5 10 15
 Trp Ala Pro Phe Tyr Asp Cys Phe Pro Pro Gln Thr Cys Phe Trp Met
 20 25 30

<211> 786

<213> Homo sapiens

Met	Phe	Thr	Asp	Phe	Leu	Ser	Phe	Met	Val	Leu	Phe	Asn	Phe	Ile	Ile
1				5					10					15	
Pro	Val	Ser	Met	Tyr	Val	Thr	Val	Glu	Met	Gln	Lys	Phe	Leu	Gly	Ser
			20					25					30		
Phe	Phe	Ile	Ser	Trp	Asp	Lys	Asp	Phe	Tyr	Asp	Glu	Glu	Ile	Asn	Glu
		35					40					45			
Gly	Ala	Leu	Val	Asn	Thr	Ser	Asp	Leu	Asn	Glu	Glu	Leu	Gly	Gln	Val
	50					55					60				
Asp	Tyr	Val	Phe	Thr	Asp	Lys	Thr	Gly	Thr	Leu	Thr	Glu	Asn	Ser	Met
65					70					75					80
Glu	Phe	Ile	Glu	Cys	Cys	Ile	Asp	Gly	His	Lys	Tyr	Lys	Gly	Val	Thr
				85					90					95	

Gln Glu Val Asp Gly Leu Ser Gln Thr Asp Gly Thr Leu Thr Tyr Phe			
100	105	110	
Asp Lys Val Asp Lys Asn Arg Glu Glu Leu Phe Leu Arg Ala Leu Cys			
115	120	125	
Leu Cys His Thr Val Glu Ile Lys Thr Asn Asp Ala Val Asp Gly Ala			
130	135	140	
Thr Glu Ser Ala Glu Leu Thr Tyr Ile Ser Ser Ser Pro Asp Glu Ile			
145	150	155	160
Ala Leu Val Lys Gly Ala Lys Arg Tyr Gly Phe Thr Phe Leu Gly Asn			
165	170	175	
Arg Asn Gly Tyr Met Arg Val Glu Asn Gln Arg Lys Glu Ile Glu Glu			
180	185	190	
Tyr Glu Pro Leu His Thr Leu Asn Phe Asp Ala Val Arg Arg Arg Met			
195	200	205	
Ser Val Ile Val Lys Thr Gln Glu Gly Asp Ile Leu Leu Phe Cys Lys			
210	215	220	
Gly Ala Asp Ser Ala Val Phe Pro Arg Val Gln Asn His Glu Ile Glu			
225	230	235	240
Leu Thr Lys Val His Val Glu Arg Asn Ala Met Asp Gly Tyr Arg Thr			
245	250	255	
Leu Cys Val Ala Phe Lys Glu Ile Ala Pro Asp Asp Tyr Glu Arg Ile			
260	265	270	
Asn Arg Gln Leu Ile Glu Ala Lys Met Ala Leu Gln Asp Arg Glu Glu			
275	280	285	
Lys Met Glu Lys Val Phe Asp Asp Ile Glu Thr Asn Met Asn Leu Ile			
290	295	300	
Gly Ala Thr Ala Val Glu Asp Lys Leu Gln Asp Gln Ala Ala Glu Thr			
305	310	315	320
Ile Glu Ala Leu His Ala Ala Gly Leu Lys Val Trp Val Leu Thr Gly			
325	330	335	
Asp Lys Met Glu Thr Ala Lys Ser Thr Cys Tyr Ala Cys Arg Leu Phe			
340	345	350	
Gln Thr Asn Thr Glu Leu Leu Glu Leu Thr Thr Lys Thr Ile Glu Glu			
355	360	365	
Ser Glu Arg Lys Glu Asp Arg Leu His Glu Leu Leu Ile Glu Tyr Arg			
370	375	380	

Ala Leu Asp Thr Arg Phe Trp Thr Trp Ile Asn His Phe Val Ile Trp
675 680 685
Gly Ser Leu Ala Phe Tyr Val Phe Phe Ser Phe Phe Trp Gly Gly Ile
690 695 700
Ile Trp Pro Phe Leu Lys Gln Gln Arg Met Tyr Phe Val Phe Ala Gln
705 710 715 720
Met Leu Ser Ser Val Ser Thr Trp Leu Ala Ile Ile Leu Leu Ile Phe
725 730 735
Ile Ser Leu Phe Pro Glu Ile Leu Leu Ile Val Leu Lys Asn Val Arg
740 745 750
Arg Arg Ser Ala Arg Val Thr Lys Arg Leu Pro Ser Ser Gly Thr Ser
755 760 765
Ala Ile Phe Met Leu Ser Gln Thr Ser Ser Asn His Ser Phe Ser Trp
770 775 780
Ser Glu
785

<210> 3864

<211> 146

<212> PRT

<213> Homo sapiens

<400> 3864

Met Ser Ser Arg Ser Leu His Ser Gln Gln Trp Thr Trp Arg Met Gly
1 5 10 15
Ser Ala Arg Pro Thr Leu Thr Gly Ser Ala His Pro Thr Leu Arg Gly
20 25 30
Ser Ala Arg Pro Thr Leu Thr Gly Ser Ala His Pro Thr Leu Thr Gly
35 40 45
Ser Ala His Pro His Ser Trp Pro Cys Pro Ala Pro Gly Ala Ile Gly
50 55 60
Val Ala Leu Ile Gln Pro Leu Phe Leu Ser Gly Pro Phe Pro His Val
65 70 75 80
Ala Leu His Thr His Pro His Ser Gly Pro Ser Ala Thr Glu Gln Asn
85 90 95

His Ala Thr Pro Phe Thr Arg Pro Pro Arg Arg Gly Glu Gly Leu Pro
 100 105 110
 Ala Glu Cys Leu Ala Leu His Gln His Leu Leu Ser Ser Pro Thr Thr
 115 120 125
 Pro Ala Pro Ala Ser Ser Arg Pro Arg Ser Ser Ser Ser Ser Glu Pro
 130 135 140
 His Leu
 145

<210> 3865

<211> 854

<212> PRT

<213> Homo sapiens

<400> 3865

Met Lys Val Glu Ala Cys Thr Trp Ala Gly Tyr Ser Gly Leu Tyr Glu
 1 5 10 15
 Ala Ile Glu Ser Trp Asp Phe Lys Lys Ile Glu Lys Leu Glu Glu Tyr
 20 25 30
 Arg Leu Leu Leu Lys Arg Leu Gln Pro Glu Phe Lys Thr Arg Ile Ile
 35 40 45
 Pro Thr Asp Ile Ile Ser Asp Leu Ser Glu Cys Leu Ile Asn Gln Glu
 50 55 60
 Cys Glu Glu Ile Leu Gln Ile Cys Ser Thr Lys Gly Met Met Ala Gly
 65 70 75 80
 Ala Glu Lys Leu Val Glu Cys Leu Leu Arg Ser Asp Lys Glu Asn Trp
 85 90 95
 Pro Lys Thr Leu Lys Leu Ala Leu Glu Lys Glu Arg Asn Lys Phe Ser
 100 105 110
 Glu Leu Trp Ile Val Glu Lys Gly Ile Lys Asp Val Glu Thr Glu Asp
 115 120 125
 Leu Glu Asp Lys Met Glu Thr Ser Asp Ile Gln Ile Phe Tyr Gln Glu
 130 135 140
 Asp Pro Glu Cys Gln Asn Leu Ser Glu Asn Ser Cys Pro Pro Ser Glu
 145 150 155 160

Val Ser Asp Thr Asn Leu Tyr Ser Pro Phe Lys Pro Arg Asn Tyr Gln			
	165	170	175
Leu Glu Leu Ala Leu Pro Ala Met Lys Gly Lys Asn Thr Ile Ile Cys			
	180	185	190
Ala Pro Thr Gly Cys Gly Lys Thr Phe Val Ser Leu Leu Ile Cys Glu			
	195	200	205
His His Leu Lys Lys Phe Pro Gln Gly Gln Lys Gly Lys Val Val Phe			
	210	215	220
Phe Ala Asn Gln Ile Pro Val Tyr Glu Gln Gln Lys Ser Val Phe Ser			
225	230	235	240
Lys Tyr Phe Glu Arg His Gly Tyr Arg Val Thr Gly Ile Ser Gly Ala			
	245	250	255
Thr Ala Glu Asn Val Pro Val Glu Gln Ile Val Glu Asn Asn Asp Ile			
	260	265	270
Ile Ile Leu Thr Pro Gln Ile Leu Val Asn Asn Leu Lys Lys Gly Thr			
	275	280	285
Ile Pro Ser Leu Ser Ile Phe Thr Leu Met Ile Phe Asp Glu Cys His			
	290	295	300
Asn Thr Ser Lys Gln His Pro Tyr Asn Met Ile Met Phe Asn Tyr Leu			
305	310	315	320
Asp Gln Lys Leu Gly Gly Ser Ser Gly Pro Leu Pro Gln Val Ile Gly			
	325	330	335
Leu Thr Ala Ser Val Gly Val Gly Asp Ala Lys Asn Thr Asp Glu Ala			
	340	345	350
Leu Asp Tyr Ile Cys Lys Leu Cys Ala Ser Leu Asp Ala Ser Val Ile			
	355	360	365
Ala Thr Val Lys His Asn Leu Glu Glu Leu Glu Gln Val Val Tyr Lys			
	370	375	380
Pro Gln Lys Phe Phe Arg Lys Val Glu Ser Arg Ile Ser Asp Lys Phe			
385	390	395	400
Lys Tyr Ile Ile Ala Gln Leu Met Arg Asp Thr Glu Ser Leu Ala Lys			
	405	410	415
Arg Ile Cys Lys Asp Leu Glu Asn Leu Ser Gln Ile Gln Asn Arg Glu			
	420	425	430
Phe Gly Thr Gln Lys Tyr Glu Gln Trp Ile Val Thr Val Gln Lys Ala			
	435	440	445

Cys Met Val Phe Gln Met Pro Asp Lys Asp Glu Glu Ser Arg Ile Cys
 450 455 460
 Lys Ala Leu Phe Leu Tyr Thr Ser His Leu Arg Lys Tyr Asn Asp Ala
 465 470 475 480
 Leu Ile Ile Ser Glu His Ala Arg Met Lys Asp Ala Leu Asp Tyr Leu
 485 490 495
 Lys Asp Phe Phe Ser Asn Val Arg Ala Ala Gly Phe Asp Glu Ile Glu
 500 505 510
 Gln Asp Leu Thr Gln Arg Phe Glu Glu Lys Leu Gln Glu Leu Glu Ser
 515 520 525
 Val Ser Arg Asp Pro Ser Asn Glu Asn Pro Lys Leu Glu Asp Leu Cys
 530 535 540
 Phe Ile Leu Gln Glu Glu Tyr His Leu Asn Pro Glu Thr Ile Thr Ile
 545 550 555 560
 Leu Phe Val Lys Thr Arg Ala Leu Val Asp Ala Leu Lys Asn Trp Ile
 565 570 575
 Glu Gly Asn Pro Lys Leu Ser Phe Leu Lys Pro Gly Ile Leu Thr Gly
 580 585 590
 Arg Gly Lys Thr Asn Gln Asn Thr Gly Met Thr Leu Pro Ala Gln Lys
 595 600 605
 Cys Ile Leu Asp Ala Phe Lys Ala Ser Gly Asp His Asn Ile Leu Ile
 610 615 620
 Ala Thr Ser Val Ala Asp Glu Gly Ile Asp Ile Ala Gln Cys Asn Leu
 625 630 635 640
 Val Ile Leu Tyr Glu Tyr Val Gly Asn Val Ile Lys Met Ile Gln Thr
 645 650 655
 Arg Gly Arg Gly Arg Ala Arg Gly Ser Lys Cys Phe Leu Leu Thr Ser
 660 665 670
 Asn Ala Gly Val Ile Glu Lys Glu Gln Ile Asn Met Tyr Lys Glu Lys
 675 680 685
 Met Met Asn Asp Ser Ile Leu Arg Leu Gln Thr Trp Asp Glu Ala Val
 690 695 700
 Phe Arg Glu Lys Ile Leu His Ile Gln Thr His Glu Lys Phe Ile Arg
 705 710 715 720
 Asp Ser Gln Glu Lys Pro Lys Pro Val Pro Asp Lys Glu Asn Lys Lys
 725 730 735

Leu Leu Cys Arg Lys Cys Lys Ala Leu Ala Cys Tyr Thr Ala Asp Val
 740 745 750
 Arg Val Ile Glu Glu Cys His Tyr Thr Val Leu Gly Asp Ala Phe Lys
 755 760 765
 Glu Cys Phe Val Ser Arg Pro His Pro Lys Pro Lys Gln Phe Ser Ser
 770 775 780
 Phe Glu Lys Arg Ala Lys Ile Phe Cys Ala Arg Gln Asn Cys Ser His
 785 790 795 800
 Asp Trp Gly Ile His Val Lys Tyr Lys Thr Phe Glu Ile Pro Val Ile
 805 810 815
 Lys Ile Glu Ser Phe Val Val Glu Asp Ile Ala Thr Gly Val Gln Thr
 820 825 830
 Leu Tyr Ser Lys Trp Lys Asp Phe His Phe Glu Lys Ile Pro Phe Asp
 835 840 845
 Pro Ala Glu Met Ser Lys
 850

<210> 3866

<211> 1205

<212> PRT

<213> Homo sapiens

<400> 3866

Met Glu Gln Pro Asn Ser Lys Gly Tyr Ser Leu Gly Arg Thr Pro Gln
 1 5 10 15
 Gly Pro Glu Cys Ser Ser Ala Pro Ala Val Gln Val Gly Thr His Arg
 20 25 30
 Gly Leu Glu Tyr Asn Pro Gly Lys Ile Leu Pro Gly Ser Asp Tyr Gly
 35 40 45
 Leu Gly Asn Pro Pro Ala Leu Asp Pro Lys Leu Pro His Leu Pro Leu
 50 55 60
 Pro Pro Ala Pro Pro Thr Leu Ser Asp Leu Gly Gln Pro Arg Lys Ser
 65 70 75 80
 Pro Leu Thr Gly Thr Asp Lys Lys Tyr Pro Leu Met Lys Gln Arg Gly
 85 90 95

Phe Tyr Ser Asp Ile Leu Ser Pro Gly Thr Leu Asp Gln Leu Gly Glu
100 105 110
Val Cys Arg Gly Pro Arg Met Ser Gln Asn Leu Leu Arg Gln Ala Asp
115 120 125
Leu Asp Lys Phe Thr Pro Arg Val Gly Ser Phe Glu Val Pro Glu Asp
130 135 140
Phe Gln Glu Arg Met Glu Gln Gln Cys Ile Gly Ser Thr Thr Arg Leu
145 150 155 160
Leu Ala Gln Thr Asp Phe Pro Leu Gln Ala Tyr Glu Pro Lys Met Gln
165 170 175
Val Pro Phe Gln Val Leu Pro Gly Gln His Pro Arg Lys Ile Glu Ile
180 185 190
Glu Arg Arg Lys Gln Gln Tyr Leu Ser Leu Asp Ile Glu Gln Leu Leu
195 200 205
Phe Ser Gln Gly Ile Asp Ser Asn Lys Leu Met Pro Arg His Leu Asp
210 215 220
His Gln His Pro Gln Thr Ile Glu Gln Gly His Asp Pro Ile Phe Pro
225 230 235 240
Ile Tyr Leu Pro Leu Lys Val Phe Asp Asn Glu Asp Phe Asp Cys Arg
245 250 255
Thr Pro Arg Glu Trp Ile Asn Met Gly Leu Glu Pro Gly Ser Leu Asp
260 265 270
Arg Lys Pro Val Pro Gly Lys Ala Leu Leu Pro Thr Asp Asp Phe Leu
275 280 285
Gly His Glu Asp Pro Lys Ser Gln Lys Leu Lys Tyr Lys Trp Cys Glu
290 295 300
Val Gly Val Leu Asp Tyr Asp Glu Glu Lys Lys Leu Tyr Leu Val His
305 310 315 320
Lys Thr Asp Glu Lys Gly Leu Val Arg Asp Glu Met Gly Arg Pro Ile
325 330 335
Leu Asn Ala Gly Val Thr Thr Glu Gly Arg Pro Pro Leu Gln Val Cys
340 345 350
Gln Tyr Trp Val Pro Arg Ile Gln Leu Leu Phe Cys Ala Glu Asp Pro
355 360 365
Cys Met Phe Ala Gln Arg Val Val Gln Ala Asn Ala Leu Arg Lys Asn
370 375 380

Thr Glu Ala Leu Leu Leu Tyr Asn Leu Tyr Val Asp Cys Met Pro Ser
 385 390 395 400
 Asp Gly Gln His Val Ile Ser Glu Gln Ser Leu Ser Lys Ile Lys Gln
 405 410 415
 Trp Ala Leu Ser Thr Pro Arg Met Arg Lys Gly Pro Ser Val Leu Glu
 420 425 430
 His Leu Ser Ser Leu Ala Arg Glu Val Ser Leu Asp Tyr Glu Arg Ser
 435 440 445
 Met Asn Lys Ile Asn Phe Asp His Val Val Ser Ser Lys Pro Glu Thr
 450 455 460
 Phe Ser Tyr Val Thr Leu Pro Lys Lys Glu Glu Glu Gln Val Pro Glu
 465 470 475 480
 Arg Gly Leu Val Ser Val Pro Lys Tyr His Phe Trp Glu Gln Lys Glu
 485 490 495
 Asp Phe Thr Phe Val Ser Leu Leu Thr Arg Pro Glu Val Ile Thr Ala
 500 505 510
 Leu Ser Lys Val Arg Ala Glu Cys Asn Lys Val Thr Ala Met Ser Leu
 515 520 525
 Phe His Ser Ser Leu Ser Lys Tyr Ser His Leu Glu Glu Phe Glu Gln
 530 535 540
 Ile Gln Ser Gln Thr Phe Ser Gln Val Gln Met Phe Leu Lys Asp Ser
 545 550 555 560
 Trp Ile Ser Ser Leu Lys Val Ala Met Arg Ser Ser Leu Arg Asp Met
 565 570 575
 Ser Lys Gly Trp Tyr Asn Leu Tyr Glu Thr Asn Trp Glu Val Tyr Leu
 580 585 590
 Met Ser Lys Leu Arg Lys Leu Met Glu Leu Val Lys Tyr Met Leu Gln
 595 600 605
 Asp Thr Leu Arg Phe Leu Val Gln Asp Ser Leu Ala Ser Phe Ser Gln
 610 615 620
 Phe Ile Ser Asp Thr Cys Cys Ser Val Leu Asn Cys Thr Asp Asp Met
 625 630 635 640
 Val Trp Gly Asp Asp Leu Ile Asn Ser Pro Tyr Arg Pro Arg Lys Asn
 645 650 655
 Pro Leu Phe Ile Met Asp Leu Val Leu Asp Ser Ser Gly Val His Tyr
 660 665 670

Ser Thr Pro Leu Glu Gln Phe Glu Ala Ser Leu Leu Asn Leu Phe Asp
 675 680 685
 Lys Gly Ile Leu Ala Thr His Ala Val Pro Gln Leu Glu Lys Leu Val
 690 695 700
 Met Glu Asp Ile Phe Ile Ser Gly Asp Pro Leu Leu Glu Ser Val Gly

 705 710 715 720
 Leu His Glu Pro Leu Val Glu Glu Leu Arg Ala Thr Ile Ala Ser Ala
 725 730 735
 Val Ser Lys Ala Met Ile Pro Leu Gln Ala Tyr Ala Lys Glu Tyr Arg
 740 745 750
 Lys Tyr Leu Glu Leu Asn Asn Asn Asp Ile Ala Ser Phe Leu Lys Thr
 755 760 765
 Tyr Gln Thr Gln Gly Leu Leu Ala Gln Glu Val Arg Glu Val Val Leu
 770 775 780
 Thr His Leu Arg Glu Lys Glu Ile Leu Asp Ser Ser Leu Pro Ser Ser
 785 790 795 800
 Ile Ile Ile Gly Pro Phe Tyr Ile Asn Thr Asp Asn Val Lys Gln Ser
 805 810 815
 Leu Ser Lys Lys Arg Lys Ala Leu Ala Thr Ser Val Leu Asp Ile Leu
 820 825 830
 Ala Lys Asn Leu His Lys Glu Val Asp Ser Ile Cys Glu Glu Phe Arg
 835 840 845
 Ser Ile Ser Arg Lys Ile Tyr Glu Lys Pro Asn Ser Ile Glu Glu Leu
 850 855 860
 Ala Glu Leu Arg Glu Trp Met Lys Gly Ile Pro Glu Arg Leu Val Gly
 865 870 875 880
 Leu Glu Glu Arg Ile Val Lys Val Met Asp Asp Tyr Gln Val Met Asp
 885 890 895
 Glu Phe Leu Tyr Asn Leu Ser Ser Asp Asp Phe Asn Asp Lys Trp Ile
 900 905 910
 Ala Ser Asn Trp Pro Ser Lys Ile Leu Gly Gln Ile Glu Leu Val Gln
 915 920 925
 Gln Gln His Val Glu Asp Glu Glu Lys Phe Arg Lys Ile Gln Ile Met
 930 935 940
 Asp Gln Asn Asn Phe Gln Glu Lys Leu Glu Gly Leu Gln Leu Val Val

945	950	955	960
Ala Gly Phe Ser Ile His Val Glu Ile Ser Arg Ala His Glu Ile Ala			
	965	970	975
Asn Glu Val Arg Arg Val Lys Lys Gln Leu Lys Asp Cys Gln Gln Leu			
	980	985	990
Ala Met Leu Tyr Asn Asn Arg Glu Arg Ile Phe Ser Leu Pro Ile Thr			
	995	1000	1005
Asn Tyr Asp Lys Leu Ser Arg Met Val Lys Glu Phe Gln Pro Tyr Leu			
	1010	1015	1020
Asp Leu Trp Thr Thr Ala Ser Asp Trp Leu Arg Trp Ser Glu Ser Trp			
1025	1030	1035	1040
Met Asn Asp Pro Leu Ser Ala Ile Asp Ala Glu Gln Leu Glu Lys Asn			
	1045	1050	1055
Val Val Glu Ala Phe Lys Thr Met His Lys Cys Val Lys Gln Phe Lys			
	1060	1065	1070
Asp Met Pro Ala Cys Gln Glu Val Ala Leu Asp Ile Arg Ala Arg Ile			
	1075	1080	1085
Glu Glu Phe Lys Pro Tyr Ile Pro Leu Ile Gln Gly Leu Arg Asn Pro			
	1090	1095	1100
Gly Met Arg Ile Arg His Trp Glu Thr Leu Ser Asn Gln Ile Asn Ile			
1105	1110	1115	1120
Asn Val Arg Pro Lys Ala Asn Leu Thr Phe Ala Arg Cys Leu Glu Met			
	1125	1130	1135
Asn Leu Gln Asp His Ile Glu Ser Ile Ser Lys Val Ala Glu Val Ala			
	1140	1145	1150
Gly Lys Glu Tyr Ala Ile Glu Gln Val Gly Ser His Gln Arg Ala Gln			
	1155	1160	1165
Pro Leu Gln Pro Gly Pro Ala Gly Gln Pro Asp Leu Leu Leu Trp Gln			
	1170	1175	1180
Pro Gln Pro Leu Gly Arg Met Thr Val Ile Ser Pro Ile Pro Gly Val			
1185	1190	1195	1200
Met Arg Pro Arg Gly			
	1205		

<211> 266

<212> PRT

<213> Homo sapiens

<400> 3867

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Met Ala Gln Glu Lys Met Glu Leu Asp Leu Glu Pro Asp Thr Ser Tyr
  1              5              10              15
Gly Gly Thr Leu Arg Arg Ser Ser Ser Ala Pro Leu Ile His Gly Leu
      20              25              30
Ser Asp Leu Ser Gln Val Phe Gln Pro Tyr Thr Leu Arg Thr Arg Arg
      35              40              45
Asn Ser Thr Thr Ile Met Ser Arg His Ser Leu Leu Leu Ser Ser Ser
      50              55              60
Pro Asn Arg Ile Pro Ser Ser Arg Leu His Gln Ile Lys Arg Glu Glu
      65              70              75              80
Gly Leu Asp Met Val Asn Arg Glu Thr Ala His Glu Arg Glu Met Gln
      85              90              95
Thr Ala Met Gln Ile Ser Gln Ser Trp Asp Glu Ser Leu Ser Leu Ser
      100             105             110
Asp Ser Asp Phe Asp Lys Pro Glu Lys Leu Tyr Ser Pro Lys Arg Ile
      115             120             125
Asp Phe Thr Pro Val Ser Pro Ala Pro Ser Pro Thr Arg Gly Phe Gly
      130             135             140
Lys Met Phe Val Ser Ser Ser Gly Leu Pro Pro Ser Pro Val Pro Ser
      145             150             155             160
Pro Arg Arg Phe Ser Arg Arg Ser Gln Ser Pro Val Lys Cys Ile Arg
      165             170             175
Pro Ser Val Leu Gly Pro Leu Lys Arg Lys Gly Glu Met Glu Thr Glu
      180             185             190
Ser Gln Pro Lys Arg Leu Phe Gln Gly Thr Thr Asn Met Leu Ser Pro
      195             200             205
Asp Ala Ala Gln Leu Ser Asp Leu Ser Ser Cys Ser Asp Ile Leu Asp
      210             215             220
Gly Ser Ser Ser Ser Ser Gly Leu Ser Ser Asp Pro Leu Ala Lys Gly
      225             230             235             240
Ser Ala Thr Ala Glu Ser Pro Val Ala Cys Ser Asn Ser Cys Ser Ser

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245 250 255
 Phe Ile Leu Met Asp Asp Leu Ser Pro Lys
 260 265

<210> 3868

<211> 910

<212> PRT

<213> Homo sapiens

<400> 3868

Met Thr Lys His Pro Leu Ala Met Tyr Pro Asn Leu Gly Glu Asp Met
 1 5 10 15
 Pro Pro Asp Leu Leu Leu Gln Val Leu Lys Pro Leu Asp Pro Glu Arg
 20 25 30
 Lys Leu Glu Asp Ala Gly Ser Cys Glu Gly Gln Glu Lys Thr Thr Asp
 35 40 45
 Glu Pro Thr Glu Pro Gly Lys Tyr Pro Cys Gly Glu Phe Ser Pro Arg
 50 55 60
 Pro Pro Glu Thr Arg Val Ser Cys Leu Pro Pro Glu Pro Pro Lys Thr
 65 70 75 80
 Pro Val Ser Ser Leu Arg Pro Glu Pro Pro Glu Thr Gly Val Ser His
 85 90 95
 Leu Arg Pro Gln Pro Pro Lys Thr Gln Val Ser Ser Leu His Leu Glu
 100 105 110
 Pro Pro Glu Thr Gly Val Ser His Leu Arg Pro Glu Pro Pro Lys Thr
 115 120 125
 Gln Val Ser Ser Leu His Leu Glu Pro Pro Glu Thr Gly Val Ser His
 130 135 140
 Leu Tyr Leu Glu Pro Ser Gly Thr Gly Val Ser His Leu Cys Pro Glu
 145 150 155 160
 Pro Pro Lys Thr Arg Val Ser His Leu His Arg Glu Pro Pro Glu Thr
 165 170 175
 Gly Val Pro Asp Leu Cys Leu Glu Pro Pro Lys Ser Arg Val Ser His
 180 185 190
 Leu Arg Pro Glu Pro Ser Glu Thr Gly Val Ser His Leu His Pro Glu

195	200	205
Pro Pro Lys Thr Leu Val Ser Ser Leu His Pro Glu Pro Pro Glu Thr		
210	215	220
Gly Val Ser His Leu Cys Pro Glu Pro Pro Glu Thr Arg Val Ser Pro		
225	230	235
240		
Leu Arg Gln Leu Pro Pro Glu Ala Gly Val Ser His Leu Cys Pro Glu		
245	250	255
Pro Pro Lys Thr Arg Val Pro Pro Leu Arg Pro Glu Thr Pro Lys Asn		
260	265	270
Gly Val Ser Pro Leu Phe Pro Glu Pro Pro Lys Thr Arg Ile Ser Asn		
275	280	285
Leu Arg Ser Glu Pro Pro Lys Ile Gly Val Ser His Leu Cys Leu Glu		
290	295	300
Pro Pro Lys Thr Arg Gly Ser His Leu Arg Pro Glu Pro Pro Glu Thr		
305	310	315
320		
Gly Val Ser His Leu Arg Pro Glu Pro Pro Lys Thr Arg Val Ser Ser		
325	330	335
Leu His Leu Glu Pro Pro Glu Thr Gly Val Ser His Leu Cys Pro Glu		
340	345	350
Pro Pro Glu Lys Asn Val Ser His Leu Arg Pro Glu Pro Pro Asp Thr		
355	360	365
Gly Val Ser His Leu Cys Pro Glu Pro Pro Lys Thr Arg Val Ser His		
370	375	380
Leu Arg Pro Glu Pro Ser Glu Thr Gly Val Ser His Leu Arg Pro Glu		
385	390	395
400		
Pro Pro Lys Ile Leu Val Ser Ser Leu His Gln Ala Pro Pro Glu Ser		
405	410	415
Ser Val Ser His Leu Arg Pro Glu Pro Pro Glu Thr Gly Val Ser His		
420	425	430
Leu Arg Pro Glu Pro Pro Lys Thr Arg Met Tyr Ser Leu Arg Pro Glu		
435	440	445
Pro Pro Asp Thr Gly Val Ser His Leu Cys Pro Glu Pro Pro Lys Thr		
450	455	460
Arg Val Ser Ser Leu Pro Pro Glu Pro Pro Glu Thr Gly Val Ser His		
465	470	475
480		
Leu Cys Pro Glu Pro Pro Glu Thr Arg Val Ser His Leu Arg Pro Glu		

	485		490		495										
Pro	Pro	Glu	Thr	Gly	Val	Ser	His	Leu	Arg	Pro	Glu	Pro	Pro	Lys	Thr
	500							505						510	
Arg	Met	Tyr	Ser	Leu	Arg	Pro	Glu	Pro	Pro	Asn	Thr	Gly	Val	Ser	His
	515							520						525	
Leu	Cys	Pro	Glu	Pro	Pro	Lys	Thr	Arg	Val	Ser	Ser	Leu	Pro	Pro	Glu
	530							535						540	
Pro	Pro	Glu	Thr	Gly	Val	Ser	His	Leu	Cys	Pro	Glu	Pro	Pro	Glu	Thr
545								550						555	
Arg	Val	Ser	His	Leu	Arg	Pro	Glu	Pro	Pro	Glu	Thr	Gly	Val	Ser	Arg
								565						570	
Leu	His	Pro	Glu	Pro	Pro	Lys	Thr	Arg	Val	Ser	Ser	Leu	His	Ala	Glu
	580							585						590	
Pro	Pro	Glu	Ser	Arg	Val	Ser	His	Leu	Cys	Pro	Glu	Pro	Pro	Glu	Thr
	595							600						605	
Gly	Val	Ser	His	Leu	Arg	Pro	Glu	Pro	Pro	Lys	Pro	Arg	Val	Ser	Ser
	610							615						620	
Leu	Arg	Pro	Glu	Pro	Leu	Glu	Thr	Arg	Val	Ser	His	Leu	Arg	Pro	Glu
625								630						635	
Pro	Pro	Glu	Thr	Gly	Val	Ser	His	Leu	His	Pro	Glu	Leu	Pro	Lys	Pro
								645						650	
Arg	Val	Ser	Ser	Leu	His	Leu	Glu	Pro	Pro	Lys	Thr	Arg	Arg	Val	Ser
	660							665						670	
Ser	Leu	Arg	Leu	Glu	Pro	Pro	Lys	Thr	Gly	Arg	Val	Ser	Ser	Leu	Cys
	675							680						685	
Pro	Glu	Pro	Thr	Lys	Thr	Gly	Ala	Ser	His	Leu	Lys	Glu	Leu	Phe	Gln
	690							695						700	
Glu	Gly	Thr	Ser	Ser	Thr	Met	Glu	Cys	Val	Ser	Asp	Ser	Leu	Gln	Arg
705								710						715	
Arg	His	Thr	Ser	Arg	Lys	Leu	Arg	Asp	Phe	Lys	Trp	Ala	Gly	Asp	Leu
								725						730	
Gly	Val	Asn	Glu	Glu	Ser	Ile	Ser	Ser	Leu	Phe	Asp	Phe	Thr	Pro	Glu
	740							745						750	
Cys	Arg	Ala	Thr	Tyr	Gln	Asp	Gln	Lys	Asn	Lys	Lys	Ala	Asn	Glu	Cys
	755							760						765	
Ser	Ser	Gly	Leu	Lys	Tyr	Ser	Met	Glu	Leu	Asp	Glu	Met	Asp	Glu	Val

770	775	780	
Lys Phe Phe Ser Gln Glu Lys Asp Leu Asp Gly Lys Ile Gln Asn Ala			
785	790	795	800
Pro Asn Ser His Ser Ala Gln His Val Lys Met Gly Tyr Gly Ala Trp			
	805	810	815
Tyr Leu Lys Pro Lys Leu Gly Lys Lys Leu Arg Ser Asp Glu Pro Leu			
	820	825	830
Ile Asp Pro Lys Leu Val Leu Glu Lys Pro Asp Glu Pro Asp Ile Leu			
	835	840	845
Asp Gly Leu Tyr Gly Pro Ile Ala Phe Lys Asp Phe Ile Leu Ser Lys			
850	855	860	
Gly Tyr Glu Met Pro Gly Ile Ile Gln Arg Leu Phe Ala Arg Arg Gly			
865	870	875	880
Trp Thr Tyr Asp Ser Val Lys Thr Pro Ile Gln Arg Ala Met Gln Val			
	885	890	895
Tyr Lys Tyr Lys Glu Asp Val Thr Asp Ala Ser Glu Glu Asp			
	900	905	910

<210> 3869

<211> 233

<212> PRT

<213> Homo sapiens

<400> 3869

Met Arg Glu Trp Glu Asn Arg Asn Arg Gly Leu Arg Glu Leu Glu Glu			
1	5	10	15
Val Ala Gly Ser Ser Arg Thr Arg Glu Gln Leu Val Pro Arg Leu Gly			
	20	25	30
Gly Arg Ala Gly Tyr Asp Trp Trp Ala Ser Gly Glu Val Gln Ser Gly			
	35	40	45
Arg Glu Glu Ala Gly Glu Ala His Pro Ser Val Ala Glu Ser Ser Leu			
	50	55	60
Arg Thr Arg Gly Trp Gly Gly Asp Ser His Ala Met Thr Ala Ser Pro			
65	70	75	80
Val Pro Ala Leu Gln Leu Val Ser Ser Lys Arg Asp Leu Val Leu Val			

	85		90		95										
Lys	Glu	Ala	Leu	Ser	Trp	Tyr	Asp	Ala	Gln	Gln	His	Cys	Arg	Leu	His
	100		105		110										
Tyr	Thr	Asp	Leu	Ala	Asp	Leu	Gln	Pro	Ser	Gly	Leu	Trp	Lys	Leu	Tyr
	115		120		125										
Ser	Leu	Met	Thr	Ser	Thr	Pro	Ala	Trp	Ile	Gly	Leu	Phe	Phe	Asp	Ala
	130		135		140										
Ser	Thr	Ser	Gly	Leu	Arg	Trp	Ser	Ser	Gly	Ser	Thr	Phe	Thr	Ala	Leu
145			150		155				160						
Glu	Trp	Gly	Gln	Lys	Leu	Pro	Glu	Phe	Gly	Val	Gly	Phe	Cys	Ala	Thr
	165		170		175										
Leu	Tyr	Thr	Trp	Leu	Lys	Leu	Pro	Ser	Ile	Gly	Ala	Ala	Ser	Cys	Thr
	180		185		190										
Ala	Gln	Lys	Pro	Phe	Leu	Cys	Tyr	Cys	Gly	Val	Phe	Thr	Phe	Ile	Phe
	195		200		205										
Gln	Ala	Trp	Ser	Phe	Pro	Gln	Gly	Pro	His	Ser	Val	Ala	Gln	Ala	Gly
	210		215		220										
Val	Gln	Trp	Cys	Asp	His	Ser	Ser	Leu							
225			230												

<210> 3870

<211> 127

<212> PRT

<213> Homo sapiens

<400> 3870

Met	Glu	Lys	Ala	Ser	Gly	Ala	Leu	Arg	Cys	Gln	Gln	Lys	Arg	Cys	Ile
1			5				10					15			
Ser	Glu	Leu	Thr	Val	Met	Thr	Gln	Ile	Gly	Arg	Glu	Gly	Asn	Met	Trp
	20		25		30										
Val	Arg	Val	Ala	Ala	Met	Gly	Val	Asn	Met	Ile	Lys	Tyr	Gly	Gly	Gly
	35		40		45										
Val	Gln	Ile	Ser	Trp	Thr	Trp	Leu	Gln	Ser	Val	Phe	Ile	Phe	Ser	Leu
	50		55		60										
Ser	Glu	Arg	Val	Phe	Gly	Phe	Ser	Ile	Leu	Leu	Ile	Leu	Gln	Ala	Ile

65	70	75	80
His Tyr Val Pro Trp Glu Val Glu Trp Pro Ser Ser Leu Leu Cys Val			
	85	90	95
Gly Tyr Thr Ala Cys Leu Thr Ser Leu Trp Val Leu His His Leu His			
	100	105	110
Ala His Met Ile Pro Leu Phe Glu Leu Met Ala Gly Asn Arg Thr			
	115	120	125

<210> 3871

<211> 842

<212> PRT

<213> Homo sapiens

<400> 3871

Met Gly Ala Arg Ala Ala Gly Thr Ser Ser Gly Gly Gly Pro Arg Pro			
1	5	10	15
Cys Leu Ala Arg Gly Leu Ser Ala Ser Pro Phe Pro Ala Lys Gln Gln			
	20	25	30
His Pro Gln Ala Gly Ala Ser Pro Ala Glu Leu Gln Gln Arg Ala Tyr			
	35	40	45
Tyr Arg Ala Arg Gln Asp Ala Ala Ser Gln Pro Gly Leu Gly Phe Leu			
	50	55	60
Ile Ser Pro Ser Ser Cys Ser Ser Trp Gly Pro Gly Ser Phe Thr Arg			
65	70	75	80
Ser Cys Gly Tyr Pro Thr Leu Cys Ser Ser Trp Ile Ser Lys Arg Glu			
	85	90	95
Pro Gly Glu Leu Ser Gly Val Trp Thr Ser Ala Trp Arg Thr His Ala			
	100	105	110
Ala Phe Thr Gly Ser Gln Asp Leu Cys Leu Tyr Lys Gly Leu Leu Gly			
	115	120	125
Ser Ile Tyr Glu Asp Lys Thr Ala Leu Ser Leu Leu Gly Leu Gly Glu			
	130	135	140
Glu Thr Asn Glu Glu Asp Glu Glu Glu Ser Asp Asn Gln Ser Val His			
145	150	155	160
Ser Ser Ser Glu Pro Leu Arg Asn Leu His Leu Asp Ile Gly Ala Leu			

	165		170		175
Gly Gly Asp Phe Glu Tyr Glu Glu Ser Leu Arg Thr Ser Gln Pro Glu					
	180		185		190
Glu Lys Lys Asp Val Ser Leu Asp Ser Asp Ala Ala Gly Pro Pro Thr					
	195		200		205
Pro Cys Lys Pro Ser Ser Pro Gly Ala Asp Ser Ser Leu Ser Ser Ala					
	210		215		220
Val Gly Lys Gly Arg Gln Gly Ser Gly Ala Arg Pro Gly Leu Pro Glu					
225		230		235	240
Lys Glu Glu Asn Glu Lys Ser Glu Pro Lys Ile Cys Arg Asn Leu Val					
	245		250		255
Thr Pro Lys Ala Asp Pro Thr Gly Ser Glu Pro Ala Lys Ala Ser Glu					
	260		265		270
Lys Glu Ala Pro Glu Asp Thr Val Asp Ala Gly Glu Glu Gly Ser Arg					
	275		280		285
Arg Glu Glu Ala Ala Lys Glu Pro Lys Lys Lys Ala Ser Ala Leu Glu					
	290		295		300
Glu Gly Ser Ser Asp Ala Ser Gln Glu Leu Glu Ile Ser Glu His Met					
305		310		315	320
Lys Glu Pro Gln Leu Ser Asp Ser Ile Ala Ser Asp Pro Lys Ser Phe					
	325		330		335
His Gly Leu Asp Phe Gly Phe Arg Ser Arg Ile Ser Glu His Leu Leu					
	340		345		350
Asp Val Asp Val Leu Ser Pro Val Leu Gly Gly Ala Cys Arg Gln Ala					
	355		360		365
Gln Gln Pro Leu Gly Ile Glu Asp Lys Asp Asp Ser Gln Ser Ser Gln					
	370		375		380
Asp Glu Leu Gln Ser Lys Gln Ser Lys Gly Leu Glu Glu Arg Tyr His					
385		390		395	400
Arg Leu Ser Pro Pro Leu Pro His Glu Glu Arg Ala Gln Ser Pro Pro					
	405		410		415
Arg Ser Leu Ala Thr Glu Glu Glu Pro Pro Gln Gly Pro Glu Gly Gln					
	420		425		430
Pro Glu Trp Lys Glu Ala Glu Glu Leu Gly Glu Asp Ser Ala Ala Ser					
	435		440		445
Leu Ser Leu Gln Leu Ser Leu Gln Arg Arg Ser Thr Glu Pro Val Ala					

450	455	460	
Pro Pro Glu Gln Leu Ser Glu Ala Ala Leu Lys Ala Met Glu Glu Ala			
465	470	475	480
Val Ala Gln Val Leu Glu Gln Asp Gln Arg His Leu Leu Glu Ser Lys			
	485	490	495
Gln Glu Lys Met Gln Gln Leu Arg Glu Lys Leu Cys Gln Glu Glu Glu			
	500	505	510
Glu Glu Ile Leu Arg Leu His Gln Gln Lys Glu Gln Ser Leu Ser Ser			
	515	520	525
Leu Arg Glu Arg Leu Gln Lys Ala Ile Glu Glu Glu Glu Ala Arg Met			
	530	535	540
Arg Glu Glu Glu Ser Gln Arg Leu Ser Trp Leu Arg Ala Gln Val Gln			
545	550	555	560
Ser Ser Thr Gln Ala Asp Glu Asp Gln Ile Arg Ala Glu Gln Glu Ala			
	565	570	575
Ser Leu Gln Lys Leu Arg Glu Glu Leu Glu Ser Gln Gln Lys Ala Glu			
	580	585	590
Arg Ala Ser Leu Glu Gln Lys Asn Arg Gln Met Leu Glu Gln Leu Lys			
	595	600	605
Glu Glu Ile Glu Ala Ser Glu Lys Ser Glu Gln Ala Ala Leu Asn Ala			
610	615	620	
Ala Lys Glu Lys Ala Leu Gln Gln Leu Arg Glu Gln Leu Glu Gly Glu			
625	630	635	640
Arg Lys Glu Ala Val Ala Thr Leu Glu Lys Glu His Ser Ala Glu Leu			
	645	650	655
Glu Arg Leu Cys Ser Ser Leu Glu Ala Lys His Arg Glu Val Val Ser			
	660	665	670
Ser Leu Gln Lys Lys Ile Gln Glu Ala Gln Gln Lys Glu Glu Ala Gln			
	675	680	685
Leu Gln Lys Cys Leu Gly Gln Val Glu His Arg Val His Gln Lys Ser			
	690	695	700
Tyr His Val Ala Gly Tyr Glu His Glu Leu Ser Ser Leu Leu Arg Glu			
705	710	715	720
Lys Arg Gln Glu Val Glu Gly Glu His Glu Arg Arg Leu Asp Lys Met			
	725	730	735
Lys Glu Glu His Gln Gln Val Met Ala Lys Ala Arg Glu Gln Tyr Glu			

740	745	750
Ala Glu Glu Arg Lys Gln Arg	Ala Glu Leu Leu Gly His	Leu Thr Gly
755	760	765
Glu Leu Glu Arg Leu Gln Arg	Ala His Glu Arg Glu Leu	Glu Thr Val
770	775	780
Arg Gln Glu Gln His Lys Arg	Leu Glu Asp Leu Arg Arg	Arg His Arg
785	790	795
Glu Gln Glu Arg Lys Leu Gln	Asp Leu Glu Leu Asp Leu	Glu Thr Arg
805	810	815
Ala Lys Asp Val Lys Ala Arg	Leu Ala Leu Leu Glu Val	Gln Val Arg
820	825	830
Asp Leu Gln Glu Ser Leu Thr	Ser Glu Ser	
835	840	

<210> 3872

<211> 104

<212> PRT

<213> Homo sapiens

<400> 3872

Met Leu Trp Arg Lys Gly Met	Arg Ser Gln Gly Ser Glu Val	Arg Pro
1	5	10
Ala Ile Pro Gln Val Cys Gly	Trp Ala Arg Arg Gln Ala	Pro Lys Asn
20	25	30
Leu Thr Cys Asp Pro Gly Cys	Pro His Arg Leu Lys Gly	Leu Arg Asp
35	40	45
Leu Glu Thr Gly Asn Met Val	Cys Gly Gly Pro Val Asp	Pro Gly Val
50	55	60
Gly Val Arg Asp Gly Asp Arg	His Arg Asp Ile Leu Arg	Ala Arg Asp
65	70	75
Arg Lys Thr Lys Asn Asp Arg	Asn Arg Asp Thr Glu Arg	Tyr Arg Glu
85	90	95
Gly Gln Arg Pro Arg Lys	Pro Glu	

<210> 3873

<211> 181

<212> PRT

<213> Homo sapiens

<400> 3873

```

Met Leu Ala Arg Pro Gly Val Glu Ala Trp Arg Arg Arg Arg Asp Ala
 1             5             10             15
Arg Leu Arg Ala Gly Val Gly Gly Ala Cys Val Ala Gly Ala Lys Ser
          20             25             30
His Gly Ala Gly Leu Gly Ala Gly Arg Arg Ala Arg Ala Glu Thr His
          35             40             45
Val Thr Ala Ala Arg Arg Arg Asp Gly Trp Asn Phe Ser Asn Pro Lys
          50             55             60
Ser Arg Asp Arg Pro Pro Leu Ala Cys Ser Arg Ala Leu Gln Asp Pro
 65             70             75             80
Leu Ala His Gly Ala Val Pro Gly Arg Pro Leu Leu Ala Thr Arg Ala
          85             90             95
Thr Ala Gly Leu Ser Cys Leu Glu Trp Trp Pro Pro Pro Pro Ala Gly
          100             105             110
Ala Gly Ala Leu Gln Gly Pro Leu Ala Tyr Cys Ile Val Val Ala Arg
          115             120             125
Arg Leu Leu Ala Ala Thr Asp Ile Ala Gly Ser Ser Cys Ser Arg Cys
          130             135             140
Thr Gly Ser Thr Pro Ala Cys Trp Gln Leu Gly Thr Leu Leu Gly Pro
          145             150             155             160
Leu Ala Pro Thr Val Val Ala Asp Tyr Arg Glu Thr Pro Gly Ala Tyr
          165             170             175
Ala Val Trp Ser Gln
          180

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<210> 3874

<211> 1014

<212> PRT

<213> Homo sapiens

<400> 3874

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Met Pro Thr Arg Ser Arg Arg Lys Ala Arg Val Gly Lys Tyr Gly Asp
  1              5              10              15
Ser Met Thr Glu Ala Asp Lys Thr Lys Pro Leu Ser Lys Val Ser Ser
      20              25              30
Ile Ala Val Gln Thr Val Ala Glu Ile Ser Val Gln Thr Glu Pro Val
      35              40              45
Gly Thr Ile Arg Thr Pro Ser Ile Arg Ala Arg Val Asp Ala Lys Val
      50  *              55              60
Glu Ile Ile Lys His Ile Ser Ala Pro Glu Lys Thr Tyr Lys Gly Gly
      65              70              75              80
Ser Leu Gly Cys Gln Thr Glu Ala Asp Ser Asp Thr Gln Ser Pro Gln
      85              90              95
Tyr Leu Ser Ala Thr Ser Pro Pro Lys Asp Lys Lys Arg Pro Thr Pro
      100              105              110

Leu Glu Ile Gly Tyr Ser Ser His Leu Arg Ala Asp Ser Thr Val Gln
      115              120              125
Leu Ala Pro Ser Pro Pro Lys Ser Pro Lys Val Leu Tyr Ser Pro Ile
      130              135              140
Ser Pro Leu Ser Pro Gly Lys Ala Leu Glu Ser Ala Phe Val Pro Tyr
      145              150              155              160
Glu Lys Pro Leu Pro Asp Asp Ile Ser Pro Gln Lys Val Leu His Pro
      165              170              175
Asp Met Ala Lys Val Pro Pro Ala Ser Pro Lys Thr Ala Lys Met Met
      180              185              190
Gln Arg Ser Met Ser Asp Pro Lys Pro Leu Ser Pro Thr Ala Asp Glu
      195              200              205
Ser Ser Arg Ala Pro Phe Gln Tyr Thr Glu Gly Tyr Thr Thr Lys Gly
      210              215              220
Ser Gln Thr Met Thr Ser Ser Gly Ala Gln Lys Lys Val Lys Arg Thr
      225              230              235              240
Leu Pro Asn Pro Pro Pro Glu Glu Ile Ser Thr Gly Thr Gln Ser Thr

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	245		250		255
Phe Ser Thr Met Gly Thr Val Ser Arg Arg Arg Ile Cys Arg Thr Asn					
	260		265		270
Thr Met Ala Arg Ala Lys Ile Leu Gln Asp Ile Asp Arg Glu Leu Asp					
	275		280		285
Leu Val Glu Arg Glu Ser Ala Lys Leu Arg Lys Lys Gln Ala Glu Leu					
	290		295		300
Asp Glu Glu Glu Lys Glu Ile Asp Ala Lys Leu Arg Tyr Leu Glu Met					
305		310		315	320
Gly Ile Asn Arg Arg Lys Glu Ala Leu Leu Lys Glu Arg Glu Lys Arg					
	325		330		335
Glu Arg Ala Tyr Leu Gln Gly Val Ala Glu Asp Arg Asp Tyr Met Ser					
	340		345		350
Asp Ser Glu Val Ser Ser Thr Arg Pro Thr Arg Ile Glu Ser Gln His					
	355		360		365
Gly Ile Glu Arg Pro Arg Thr Ala Pro Gln Thr Glu Phe Ser Gln Phe					
	370		375		380
Ile Pro Pro Gln Thr Gln Thr Glu Ser Gln Leu Val Pro Pro Thr Ser					
385		390		395	400
Pro Tyr Thr Gln Tyr Gln Tyr Ser Ser Pro Ala Leu Pro Thr Gln Ala					
	405		410		415
Pro Thr Ser Tyr Thr Gln Gln Ser His Phe Glu Gln Gln Thr Leu Tyr					
	420		425		430
His Gln Gln Val Ser Pro Tyr Gln Thr Gln Pro Thr Phe Gln Ala Val					
	435		440		445
Ala Thr Met Ser Phe Thr Pro Gln Val Gln Pro Thr Pro Thr Pro Gln					
	450		455		460
Pro Ser Tyr Gln Leu Pro Ser Gln Met Met Val Ile Gln Gln Lys Pro					
465		470		475	480
Arg Gln Thr Thr Leu Tyr Leu Glu Pro Lys Ile Thr Ser Asn Tyr Glu					
	485		490		495
Val Ile Arg Asn Gln Pro Leu Met Ile Ala Pro Val Ser Thr Asp Asn					
	500		505		510
Thr Phe Ala Val Ser His Leu Gly Ser Lys Tyr Asn Ser Leu Asp Leu					
	515		520		525
Arg Ile Gly Leu Glu Glu Arg Ser Ser Met Ala Ser Ser Pro Ile Ser					

530	535	540	
Ser Ile Ser Ala Asp Ser Phe Tyr Ala Asp Ile Asp His His Thr Pro			
545	550	555	560
Arg Asn Tyr Val Leu Ile Asp Asp Ile Gly Glu Ile Thr Lys Gly Thr			
	565	570	575
Ala Ala Leu Ser Thr Ala Phe Ser Leu His Glu Lys Asp Leu Ser Lys			
	580	585	590
Thr Asp Arg Leu Leu Arg Thr Thr Glu Thr Arg Arg Ser Gln Glu Val			
	595	600	605
Thr Asp Phe Leu Ala Pro Leu Gln Ser Ser Ser Arg Leu His Ser Tyr			
610	615	620	
Val Lys Ala Glu Glu Asp Pro Met Glu Asp Pro Tyr Glu Leu Lys Leu			
625	630	635	640
Leu Lys His Gln Ile Lys Gln Glu Phe Arg Arg Gly Thr Glu Ser Leu			
	645	650	655
Asp His Leu Ala Gly Leu Ser His Tyr Tyr His Ala Asp Thr Ser Tyr			
	660	665	670
Arg His Phe Pro Lys Ser Glu Lys Tyr Ser Ile Ser Arg Leu Thr Leu			
	675	680	685
Glu Lys Gln Ala Ala Lys Gln Leu Pro Ala Ala Ile Leu Tyr Gln Lys			
690	695	700	
Gln Ser Lys His Lys Lys Ser Leu Ile Asp Pro Lys Met Ser Lys Phe			
705	710	715	720
Ser Pro Ile Gln Glu Ser Arg Asp Leu Glu Pro Asp Tyr Ser Ser Tyr			
	725	730	735
Met Thr Ser Ser Thr Ser Ser Ile Gly Gly Ile Ser Ser Arg Ala Arg			
	740	745	750
Leu Leu Gln Asp Asp Ile Thr Phe Gly Leu Arg Lys Asn Ile Thr Asp			
	755	760	765
Gln Gln Lys Phe Met Gly Ser Ser Leu Gly Thr Gly Leu Gly Thr Leu			
770	775	780	
Gly Asn Thr Ile Arg Ser Ala Leu Gln Asp Glu Ala Asp Lys Pro Tyr			
785	790	795	800
Ser Ser Gly Ser Arg Ser Arg Pro Ser Ser Arg Pro Ser Ser Val Tyr			
	805	810	815
Gly Leu Asp Leu Ser Ile Lys Arg Asp Ser Ser Ser Ser Ser Leu Arg			

820 825 830
 Leu Lys Ala Gln Glu Ala Glu Ala Leu Asp Val Ser Phe Ser His Ala
 835 840 845
 Ser Ser Ser Ala Arg Thr Lys Pro Thr Ser Leu Pro Ile Ser Gln Ser
 850 855 860
 Arg Gly Arg Ile Pro Ile Val Ala Gln Asn Ser Glu Glu Glu Ser Pro
 865 870 875 880
 Leu Ser Pro Val Gly Gln Pro Met Gly Met Ala Arg Ala Ala Ala Gly
 885 890 895
 Pro Leu Pro Pro Ile Ser Ala Asp Thr Arg Asp Gln Phe Gly Ser Ser
 900 905 910
 His Ser Leu Pro Glu Val Gln Gln His Met Arg Glu Glu Ser Arg Thr
 915 920 925
 Arg Gly Tyr Asp Arg Asp Ile Ala Phe Ile Met Asp Asp Phe Gln His
 930 935 940
 Ala Met Ser Asp Ser Glu Gly Lys Leu Gly Leu Lys Leu Pro Cys Tyr
 945 950 955 960
 Ser Gln Asn Ser Asn Ser Tyr Phe Ser Ala Cys Leu Ile Ser Leu Leu
 965 970 975
 Gln Arg Cys Ile Leu Leu Phe Leu Val Cys Leu Leu His Val Tyr Phe
 980 985 990
 Asn Phe Ile Ser Cys Lys Trp Lys Phe Tyr His Val Tyr Arg Phe Cys
 995 1000 1005
 Ser Met Leu Phe Phe Ile
 1010

<210> 3875

<211> 166

<212> PRT

<213> Homo sapiens

<400> 3875

Met Thr Val Val Val Pro Leu Ile Ile Gly Gln Ile Val Arg Arg Tyr
 1 5 10 15
 Ile Lys Asp Trp Leu Glu Arg Lys Lys Pro Pro Phe Gly Ala Ile Ser

20 25 30
 Ser Ser Val Leu Leu Met Ile Ile Tyr Thr Thr Phe Cys Asp Thr Phe
 35 40 45
 Ser Asn Pro Asn Ile Asp Leu Asp Lys Phe Ser Leu Val Leu Ile Leu
 50 55 60
 Phe Ile Ile Phe Ser Ile Gln Leu Ser Phe Met Leu Leu Thr Phe Ile
 65 70 75 80
 Phe Ser Thr Arg Asn Asn Ser Gly Phe Thr Pro Ala Asp Thr Val Ala
 85 90 95
 Ile Ile Phe Cys Ser Thr His Lys Ser Leu Thr Leu Gly Ile Pro Met
 100 105 110
 Leu Lys Ile Val Phe Ala Gly His Glu His Leu Ser Leu Ile Ser Val
 115 120 125
 Pro Leu Leu Ile Tyr His Pro Ala Gln Ile Leu Leu Gly Ser Val Leu
 130 135 140
 Val Pro Thr Ile Lys Ser Trp Met Val Ser Arg Gln Lys Gly Val Lys
 145 150 155 160
 Leu Thr Arg Pro Thr Val
 165

<210> 3876

<211> 144

<212> PRT

<213> Homo sapiens

<400> 3876

Met Ser Trp Thr Phe Arg Gly Gly Ser Ser Trp Thr Cys Leu Gly Val
 1 5 10 15
 Gly Lys Ser Val Leu Leu Ala Pro Tyr Gly Ala Ser Cys Leu Pro Leu
 20 25 30
 Trp Leu Leu His Ser Cys Thr His Pro Thr Arg Pro Gly Leu Thr His
 35 40 45
 Gly Glu Ser Trp Leu Thr Ala Ile Cys Leu Phe Gly Ser Ser Val Pro
 50 55 60
 Leu Gln Thr Trp Val Phe Ser Val Gly Val Ser Lys Gly Phe Lys Leu

145

<210> 3878

<211> 114

<212> PRT

<213> Homo sapiens

<400> 3878

```

Met Cys Gly Pro Ser Gly Asp Gly Asp Pro Arg Cys Gly Leu Arg Asn
  1             5             10             15
Gln Cys Val Ser Trp Thr Leu Leu Thr Ser Lys Leu Glu Gln Lys Arg
      20             25             30
His Leu Cys Gly Ala Leu Thr His Pro Arg Tyr Phe Ala Thr Ser Phe
      35             40             45
Asn Ile Pro Ser Leu Arg Thr Gln Thr Tyr Met Gly Asp Arg Gly Val
      50             55             60
Tyr Asn Pro Ile Ser Tyr Leu Tyr Thr Lys Pro Trp Ala Thr Glu Ser
      65             70             75             80
Val Lys Phe Met Val Ile Lys Pro Leu His Arg Gly Gly Pro Val Ser
      85             90             95
Pro Trp Lys His His Thr Leu Leu Pro Ala Gln Glu Val Met Glu Gly
      100            105            110
Asp Gly

```

<210> 3879

<211> 937

<212> PRT

<213> Homo sapiens

<400> 3879

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Met Gly Val Lys Lys Lys Lys Glu Met Gln Val Ala Ala Leu Thr Ile
  1             5             10             15
Cys His Gln Asp Leu Glu Thr Leu Lys Ser Phe Ala Asp Val Glu Gly

```

	20		25		30	
Lys	Asn	Leu	Ala	Ser	Leu	Leu
	35		40		45	
Val	Ser	Gln	Ile	His	Tyr	Ile
	50		55		60	
Ala	Asp	Lys	Asn	Gly	Met	Cys
	65		70		75	
Ile	Leu	Ala	Gly	Ile	Tyr	Leu
	85		90		95	
Lys	Val	Leu	Ala	Ser	Ser	Leu
	100		105		110	
Glu	Ala	Met	His	Arg	Phe	Thr
	115		120		125	
Thr	Asp	Leu	Tyr	Ser	Tyr	Arg
	130		135		140	
Met	Glu	Asn	Phe	Asn	Leu	Gly
	145		150		155	
Asn	Val	Leu	His	Phe	Leu	Gln
	165		170		175	
Asn	Arg	Lys	Cys	Ala	Gly	Asn
	180		185		190	
Asp	Leu	Leu	Val	Gly	Ile	Arg
	195		200		205	
Gln	Asp	Phe	Gln	Gly	Asn	Leu
	210		215		220	
Gln	Asn	Met	Cys	Gly	Leu	Leu
	225		230		235	
Asp	Asp	Leu	Leu	Arg	Thr	Val
	245		250		255	
Leu	Phe	Ile	Lys	Thr	Met	Phe
	260		265		270	
Ile	Ser	Ser	Val	Leu	Leu	Arg
	275		280		285	
Trp	Phe	Met	Ser	Ser	Cys	Arg
	290		295		300	
Ser	Ala	Val	Leu	Phe	Leu	Cys

305 310 315 320
 Gln Asn Gly Ser Met Gly Arg Ser Gly Glu Ala Leu Leu Leu Asp Thr
 325 330 335
 Ala His Val Leu Phe Thr Leu Ser Ser Gln Ile Lys Glu Pro Thr Leu
 340 345 350
 Glu Met Phe Leu Ser Arg Ile Leu Ala Ser Trp Thr Asn Ser Ala Ile
 355 360 365
 Gln Val Leu Glu Ser Ser Ser Pro Ser Leu Thr Asp Ser Leu Asn Gly
 370 375 380
 Asn Ser Ser Ile Val Gly Arg Leu Leu Glu Tyr Val Tyr Thr His Trp
 385 390 395 400
 Glu His Pro Leu Asp Ala Leu Arg His Gln Thr Lys Ile Met Phe Lys
 405 410 415
 Asn Leu Leu Gln Met His Arg Leu Thr Val Glu Gly Ala Asp Phe Val
 420 425 430
 Pro Asp Pro Phe Phe Val Glu Leu Thr Glu Ser Leu Leu Arg Leu Glu
 435 440 445
 Trp His Ile Lys Gly Lys Tyr Thr Cys Leu Gly Cys Leu Val Glu Cys
 450 455 460
 Ile Gly Val Glu His Ile Leu Ala Ile Asp Lys Thr Ile Pro Ser Gln
 465 470 475 480
 Ile Leu Glu Val Met Gly Asp Gln Ser Leu Val Pro Tyr Ala Ser Asp
 485 490 495
 Leu Leu Glu Thr Met Phe Arg Asn His Lys Ser His Leu Lys Ser Gln
 500 505 510
 Thr Ala Glu Ser Ser Trp Ile Asp Gln Trp His Glu Thr Trp Val Ser
 515 520 525

 Pro Leu Leu Phe Ile Leu Cys Glu Gly Asn Leu Asp Gln Lys Ser Tyr
 530 535 540
 Val Ile Asp Tyr Tyr Leu Pro Lys Leu Leu Ser Tyr Ser Pro Glu Ser
 545 550 555 560
 Leu Gln Tyr Met Val Lys Ile Leu Gln Thr Ser Ile Asp Ala Lys Thr
 565 570 575
 Gly Gln Glu Gln Ser Phe Pro Ser Leu Gly Ser Cys Asn Ser Arg Gly
 580 585 590

Ala Leu Gly Ala Leu Met Ala Cys Leu Arg Ile Ala Arg Ala His Gly
 595 600 605
 His Leu Gln Ser Ala Thr Asp Thr Trp Glu Asn Leu Val Ser Asp Ala
 610 615 620
 Arg Ile Lys Gln Gly Leu Ile His Gln His Cys Gln Val Arg Ile Asp
 625 630 635 640
 Thr Leu Gly Leu Leu Cys Glu Ser Asn Arg Ser Thr Glu Ile Val Ser
 645 650 655
 Met Glu Glu Met Gln Trp Ile Gln Phe Phe Ile Thr Tyr Asn Leu Asn
 660 665 670
 Ser Gln Ser Pro Gly Val Arg Gln Gln Ile Cys Ser Leu Leu Lys Lys
 675 680 685
 Leu Phe Cys Arg Ile Gln Glu Ser Ser Gln Val Leu Tyr Lys Leu Glu
 690 695 700
 Gln Ser Lys Ser Lys Arg Glu Pro Glu Asn Glu Leu Thr Lys Gln His
 705 710 715 720
 Pro Ser Val Ser Leu Gln Gln Tyr Lys Asn Phe Met Ser Ser Ile Cys
 725 730 735
 Asn Ser Leu Phe Glu Ala Leu Phe Pro Gly Ser Ser Tyr Ser Thr Arg
 740 745 750
 Phe Ser Ala Leu Thr Ile Leu Gly Ser Ile Ala Glu Val Phe His Val
 755 760 765
 Pro Glu Gly Arg Ile Tyr Thr Val Tyr Gln Leu Ser His Asp Ile Asp
 770 775 780
 Val Gly Arg Phe Gln Thr Leu Met Glu Cys Phe Thr Ser Thr Phe Glu
 785 790 795 800
 Asp Val Lys Ile Leu Ala Phe Asp Leu Leu Met Lys Leu Ser Lys Thr
 805 810 815
 Ala Val His Phe Gln Asp Ser Gly Lys Leu Gln Gly Leu Phe Gln Ala
 820 825 830
 Ala Leu Glu Leu Ser Thr Ser Thr Lys Pro Tyr Asp Cys Val Thr Ala
 835 840 845
 Ser Tyr Leu Leu Asn Phe Leu Ile Trp Gln Asp Ala Leu Pro Ser Ser
 850 855 860
 Leu Ser Ala Tyr Leu Thr Gln Gln Val Ala Cys Asp Asn Gly Asp Arg
 865 870 875 880

Pro Ala Ala Val Val Glu Arg Asn Thr Leu Met Val Ile Lys Cys Leu
 885 890 895
 Met Glu Asn Leu Glu Glu Glu Val Ser Gln Ala Glu Asn Ser Leu Leu
 900 905 910
 Gln Ala Ala Ala Ala Phe Pro Met Tyr Gly Arg Val His Cys Ile Thr
 915 920 925
 Gly Ala Leu Gln Lys Leu Ser Leu Lys
 930 935

<210> 3880

<211> 1013

<212> PRT

<213> Homo sapiens

<400> 3880

Met Leu Leu Gln Leu Leu Lys Glu Ser Leu Trp Lys Ile Ser Asp Val
 1 5 10 15
 Ala Trp Thr Ile Gln Leu Thr Gln Asp Phe Lys Gln Gln Met Gly Ser
 20 25 30
 Tyr Ser Asn Asn Ser Thr Glu Lys Lys Phe Leu Trp Lys Ala Leu Gly
 35 40 45
 Thr Thr Leu Ala Cys Cys Gln Asp Ser Asp Phe Val Asn Ser Gln Ile
 50 55 60
 Lys Glu Phe Leu Thr Ala Pro Asn Gln Leu Gly Asp Gln Arg Gln Gly
 65 70 75 80
 Ile Thr Ser Ile Leu Gly Tyr Cys Ala Glu Asn His Leu Asp Ile Val
 85 90 95
 Leu Lys Val Leu Lys Thr Phe Gln Asn Gln Glu Lys Phe Phe Met Asn
 100 105 110
 Arg Cys Lys Ser Leu Phe Ser Gly Lys Lys Ser Leu Thr Lys Thr Asp
 115 120 125
 Val Met Val Ile Tyr Gly Ala Val Ala Leu His Ala Pro Lys Lys Gln
 130 135 140
 Leu Leu Ser Arg Leu Asn Gln Asp Ile Ile Ser Gln Val Leu Ser Leu

145	150	155	160
His Gly Gln Cys Ser Gln Val Leu Gly Met Ser Val Met Asn Lys Asp			
	165	170	175
Met Asp Leu Gln Met Ser Phe Thr Arg Ser Ile Thr Glu Ile Gly Ile			
	180	185	190
Ala Val Gln Asp Ala Glu Asp Gln Gly Phe Gln Phe Ser Tyr Lys Glu			
	195	200	205
Met Leu Ile Gly Tyr Met Leu Asp Phe Ile Arg Asp Glu Pro Leu Asp			
	210	215	220
Ser Leu Ala Ser Pro Ile Arg Trp Lys Ala Leu Ile Ala Ile Arg Tyr			
225	230	235	240
Leu Ser Lys Leu Lys Pro Gln Leu Ser Leu Gln Asp His Leu Asn Ile			
	245	250	255
Leu Glu Glu Asn Ile Arg Arg Leu Leu Pro Leu Pro Pro Leu Glu Asn			
	260	265	270
Leu Lys Ser Glu Gly Gln Thr Asp Lys Asp Lys Glu His Ile Gln Phe			
	275	280	285
Leu Tyr Glu Arg Ser Met Asp Ala Leu Gly Lys Leu Leu Lys Thr Met			
	290	295	300
Met Trp Asp Asn Val Asn Ala Glu Asp Cys Gln Glu Met Phe Asn Leu			
305	310	315	320
Leu Gln Met Trp Leu Val Ser Gln Lys Glu Trp Glu Arg Glu Arg Ala			
	325	330	335
Phe Gln Ile Thr Ala Lys Val Leu Thr Asn Asp Ile Glu Ala Pro Glu			
	340	345	350
Asn Phe Lys Ile Gly Ser Leu Leu Gly Leu Leu Ala Pro His Ser Cys			
	355	360	365
Asp Thr Leu Pro Thr Ile Arg Gln Ala Ala Ala Ser Ser Thr Ile Gly			
	370	375	380
Leu Phe Tyr Ile Lys Gly Ile His Leu Glu Val Glu Arg Leu Gln Gly			
385	390	395	400
Leu Gln Glu Gly Leu Glu Ser Asp Asp Val Gln Val Gln Ile Lys Ile			
	405	410	415
Ser Ser Lys Ile Ala Lys Ile Val Ser Lys Phe Ile Pro Asn Glu Glu			
	420	425	430
Ile Leu Met Phe Leu Glu Glu Met Leu Asp Gly Leu Glu Ser Leu Asn			

435	440	445
Pro Thr Cys Thr Lys Ala Cys Gly Ile Trp Met Ile Thr Val Leu Lys		
450	455	460
Gln Gln Gly Ala Ala Leu Glu Asp Gln Leu Leu Glu Ile Leu Gly Thr		
465	470	475
Ile Tyr His His Met Pro Val Leu Arg Gln Lys Glu Glu Ser Phe Gln		
	485	490
Phe Ile Leu Glu Ala Ile Ser Gln Ile Ala Ser Phe His Met Asp Thr		495
	500	510
Val Val Val Asn Leu Leu Gln Lys Pro Leu Pro Phe Asp Arg Asp Thr		
	515	520
Lys Thr Leu Trp Lys Ala Leu Ala Glu Lys Pro Ala Ser Ser Gly Lys		525
	530	540
Leu Leu Gln Ala Leu Ile Asp Lys Leu Glu Thr Glu Leu Glu Asp Asp		
545	550	555
Ile Ala Arg Val Glu Ala Ile Ser Val Ala Cys Ala Met Tyr Glu Val		
	565	570
Ile Ser Met Gly Thr Ser Val Thr Gly Leu Tyr Pro Glu Leu Phe Thr		575
	580	585
Leu Leu Leu Lys Leu Val Ser Cys Thr Leu Gly Gln Lys Met Pro Thr		590
	595	600
Cys Pro Trp Ser His Arg Arg His Val Met Gln Gln Gly Glu Gln Gln		605
	610	615
Gln Ile Pro Asp Pro Cys Arg Leu Ser Thr Ala Thr Leu Lys Cys Leu		620
625	630	635
Gln Ala Gln Ala Met Arg Glu Gly Leu Ala Lys Glu Ser Asp Glu Gly		
	645	650
Asp Asn Leu Trp Thr Leu Leu Ser Ser Pro Ser Thr His His Ile Gly		655
	660	665
Val Cys Ser Leu Ala Arg Ser Met Ala Val Trp Gln His Gly Val Ile		670
	675	680
Leu Asp Ile Met Glu Gln Leu Leu Ser Ser Leu Thr Ser Ser Ser Glu		685
	690	700
Asn Tyr Arg Ile Thr Gly Ala Ala Phe Phe Ser Glu Leu Met Lys Glu		
705	710	715
Pro Ile Leu Trp Lys His Gly Asn Leu Arg Asn Val Leu Ile Leu Met		720

1010

<210> 3881

<211> 106

<212> PRT

<213> Homo sapiens

<400> 3881

```

Met Ile Thr Glu Ile Arg Arg Arg Gly Ser Lys Asp Pro Leu Val Lys
  1             5             10             15
Ala Leu Gln Leu Leu Asp Ser Pro Cys Glu Pro Ala Asp Gly Gly Leu
      20             25             30
Lys Ser Glu Thr Leu Ala Lys Arg Arg Ser Ser Lys Asp Leu Leu Gly
      35             40             45
Lys Pro Pro Gln Leu Tyr Asp Thr Pro Tyr Glu Pro Ala Glu Gly Gly
      50             55             60
Pro Arg Ala Glu Gly Lys Ala Arg Pro Pro Asp Ser Arg Leu Pro Glu
      65             70             75             80
Asn Asp Glu Arg Pro Ala Ala Glu Tyr Glu Gln Pro Trp Glu Trp Lys
      85             90             95
Lys Glu Gln Ile Val Arg Ala Leu Ser Val
      100             105

```

<210> 3882

<211> 129

<212> PRT

<213> Homo sapiens

<400> 3882

```

Met Leu Thr Thr Ser Gly Gly Gly Thr Gly Pro Leu Glu Gly Leu Gln
  1             5             10             15
Glu Glu Ala Ser Ile Ser Leu Ile Thr Ala Leu Thr Val Ser Leu Lys
      20             25             30
Thr Thr Arg Pro Cys Cys Leu Phe Ile Gly Arg Val Ser Pro Ala Phe

```

<213> Homo sapiens

[illegible]

115

<210> 3884

<211> 108

<212> PRT

<213> Homo sapiens

<400> 3884

```

Met Gln Thr Ser Tyr Met Tyr Asn Leu Ile Ser Phe Asp Lys Ile Ile
  1              5              10              15
His Leu Cys Asn His His Leu Ser Gln Asp Leu Glu His Phe His His
      20              25              30
Pro Glu Ser Pro Leu Ile Ile Ser Phe Gln Gln Ile Leu Thr Ser Gln
      35              40              45
Arg Gln Pro Val Thr Ile Asp Tyr Phe Thr Cys Ser Tyr Thr Ser Tyr
      50              55              60
Val Leu Phe Cys Phe Leu Phe Lys Leu Asn Leu Thr Phe Ser Ile Leu
      65              70              75              80
Ile Tyr Phe Ala Val Cys Ile Ser Ser Ser Leu Lys Lys Phe Leu Gly
      85              90              95
Cys Phe Pro Leu Tyr Glu Tyr Pro Thr Ile Asp Ile
      100              105

```

<210> 3885

<211> 499

<212> PRT

<213> Homo sapiens

<400> 3885

```

Met Phe Asp Met Gly Phe Glu Pro Gln Val Met Arg Ile Val Asp Asn
  1              5              10              15
Val Arg Pro Asp Arg Gln Thr Val Met Phe Ser Ala Thr Phe Pro Arg
      20              25              30
Ala Met Glu Ala Leu Ala Arg Arg Ile Leu Ser Lys Pro Ile Glu Val

```

35	40	45
Gln Val Gly Gly Arg Ser Val Val Cys Ser Asp Val Glu Gln Gln Val		
50	55	60
Ile Val Ile Glu Glu Glu Lys Lys Phe Leu Lys Leu Leu Glu Leu Leu		
65	70	75
Gly His Tyr Gln Glu Ser Gly Ser Val Ile Ile Phe Val Asp Lys Gln		
85	90	95
Glu His Ala Asp Gly Leu Leu Lys Asp Leu Met Arg Ala Ser Tyr Pro		
100	105	110
Cys Met Ser Leu His Gly Gly Ile Asp Gln Tyr Asp Arg Asp Ser Ile		
115	120	125
Ile Asn Asp Phe Lys Asn Gly Thr Cys Lys Leu Leu Val Ala Thr Ser		
130	135	140
Val Ala Ala Arg Gly Leu Asp Val Lys His Leu Ile Leu Val Val Asn		
145	150	155
Tyr Ser Cys Pro Asn His Tyr Glu Asp Tyr Val His Arg Ala Gly Arg		
165	170	175
Thr Gly Arg Ala Gly Asn Lys Gly Tyr Ala Tyr Thr Phe Ile Thr Glu		
180	185	190
Asp Gln Ala Arg Tyr Ala Gly Asp Ile Ile Lys Ala Leu Glu Leu Ser		
195	200	205
Gly Thr Ala Val Pro Pro Asp Leu Glu Lys Leu Trp Ser Asp Phe Lys		
210	215	220
Asp Gln Gln Lys Ala Glu Gly Lys Ile Ile Lys Lys Ser Ser Gly Phe		
225	230	235
Ser Gly Lys Gly Phe Lys Phe Asp Glu Thr Glu Gln Ala Leu Ala Asn		
245	250	255
Glu Arg Lys Lys Leu Gln Lys Ala Ala Leu Gly Leu Gln Asp Ser Asp		
260	265	270
Asp Glu Asp Ala Ala Val Asp Ile Asp Glu Gln Ile Glu Ser Met Phe		
275	280	285
Asn Ser Lys Lys Arg Val Lys Asp Met Ala Ala Pro Gly Thr Ser Ser		
290	295	300
Val Pro Ala Pro Thr Ala Gly Asn Ala Glu Lys Leu Glu Ile Ala Lys		
305	310	315
Arg Leu Ala Leu Arg Ile Asn Ala Gln Lys Asn Leu Gly Ile Glu Ser		

	325		330		335
Gln Val Asp Val Met Gln Gln Ala Thr Asn Ala Ile Leu Arg Gly Gly					
	340		345		350
Thr Ile Leu Ala Pro Thr Val Ser Ala Lys Thr Ile Ala Glu Gln Leu					
	355		360		365
Ala Glu Lys Ile Asn Ala Lys Leu Asn Tyr Val Pro Leu Glu Lys Gln					
	370		375		380
Glu Glu Glu Arg Gln Asp Gly Gly Gln Asn Glu Ser Phe Lys Arg Tyr					
385		390		395	400
Glu Glu Glu Leu Glu Ile Asn Asp Phe Pro Gln Thr Ala Arg Trp Lys					
	405		410		415
Val Thr Ser Lys Glu Ala Leu Gln Arg Ile Ser Glu Tyr Ser Glu Ala					
	420		425		430
Ala Ile Thr Ile Arg Gly Thr Tyr Phe Pro Pro Gly Lys Glu Pro Lys					
	435		440		445
Glu Gly Glu Arg Lys Ile Tyr Leu Ala Ile Glu Ser Ala Asn Glu Leu					
	450		455		460
Ala Val Gln Lys Ala Lys Ala Glu Ile Thr Arg Leu Ile Lys Glu Glu					
465		470		475	480
Leu Ile Arg Leu Gln Asn Ser Tyr Gln Pro Thr Asn Lys Gly Arg Tyr					
	485		490		495
Lys Val Leu					

<210> 3886

<211> 671

<212> PRT

<213> Homo sapiens

<400> 3886

Met Asn Glu Tyr Leu Ser Ser Phe Lys Val Ala Gln Tyr Val Val Arg
1 5 10 15
Glu Glu Asp Gly Val Glu Glu Val Glu Arg Glu Ile Ile Lys Gln Glu
20 25 30
Glu Asn Val Asp Pro Asp Tyr Trp Glu Lys Leu Leu Arg His His Tyr

35	40	45
Glu Gln Gln Gln Glu Asp Leu Ala Arg Asn Leu Gly Lys Gly Lys Arg		
50	55	60
Ile Arg Lys Gln Val Asn Tyr Asn Asp Ala Ser Gln Glu Asp Gln Glu		
65	70	75
Trp Gln Asp Glu Leu Ser Asp Asn Gln Ser Glu Tyr Ser Ile Gly Ser		
85	90	95
Glu Asp Glu Asp Glu Asp Phe Glu Glu Arg Pro Glu Gly Gln Ser Gly		
100	105	110
Arg Arg Gln Ser Arg Arg Gln Leu Lys Ser Asp Arg Asp Lys Pro Leu		
115	120	125
Pro Pro Leu Leu Ala Arg Val Gly Gly Asn Ile Glu Val Leu Gly Phe		
130	135	140
Asn Ala Arg Gln Arg Lys Ala Phe Leu Asn Ala Ile Met Arg Trp Gly		
145	150	155
Met Pro Pro Gln Asp Ala Phe Asn Ser His Trp Leu Val Arg Asp Leu		
165	170	175
Arg Gly Lys Ser Glu Lys Glu Phe Arg Ala Tyr Val Ser Leu Phe Met		
180	185	190
Arg His Leu Cys Glu Pro Gly Ala Asp Gly Ala Glu Thr Phe Ala Asp		
195	200	205
Gly Val Pro Arg Glu Gly Leu Ser Arg Gln His Val Leu Thr Arg Ile		
210	215	220
Gly Val Met Ser Leu Val Arg Lys Lys Val Gln Glu Phe Glu His Val		
225	230	235
Asn Gly Lys Tyr Ser Thr Pro Asp Leu Ile Pro Glu Gly Pro Glu Gly		
245	250	255
Lys Lys Pro Gly Glu Val Ile Ser Ser Asp Pro Asn Thr Pro Val Pro		
260	265	270
Ala Ser Pro Ala His Leu Leu Pro Ala Pro Leu Gly Leu Pro Asp Lys		
275	280	285
Met Glu Ala Gln Leu Gly Tyr Met Asp Glu Lys Asp Pro Gly Ala Gln		
290	295	300
Lys Pro Arg Gln Pro Leu Glu Val Gln Ala Leu Pro Ala Ala Leu Asp		
305	310	315
Arg Val Glu Ser Glu Asp Lys His Glu Ser Pro Ala Ser Lys Glu Arg		

	325		330		335
Ala Arg Glu Glu Arg Pro Glu Glu Thr Glu Lys Ala Pro Pro Ser Pro					
	340		345		350
Glu Gln Leu Pro Arg Glu Glu Val Leu Pro Glu Lys Glu Lys Ile Leu					
	355		360		365
Asp Lys Leu Glu Leu Ser Leu Ile His Ser Arg Gly Asp Ser Ser Glu					
	370		375		380
Leu Arg Pro Asp Asp Thr Lys Ala Glu Glu Lys Glu Pro Ile Glu Thr					
385		390		395	400
Gln Gln Asn Gly Asp Lys Glu Glu Asp Asp Glu Gly Lys Lys Glu Asp					
	405		410		415
Lys Lys Gly Lys Phe Lys Phe Met Phe Asn Ile Ala Asp Gly Gly Phe					
	420		425		430
Thr Glu Leu His Thr Leu Trp Gln Asn Glu Glu Arg Ala Ala Val Ser					
	435		440		445
Ser Gly Lys Ile Tyr Asp Ile Trp His Arg Arg His Asp Tyr Trp Leu					
	450		455		460
Leu Ala Gly Ile Val Thr His Gly Tyr Ala Arg Trp Gln Asp Ile Gln					
465		470		475	480
Asn Asp Pro Arg Tyr Met Ile Leu Asn Glu Pro Phe Lys Ser Glu Val					
	485		490		495
His Lys Gly Asn Tyr Leu Glu Met Lys Asn Lys Phe Leu Ala Arg Arg					
	500		505		510
Phe Lys Leu Leu Glu Gln Ala Leu Val Ile Glu Glu Gln Leu Arg Arg					
	515		520		525
Ala Ala Tyr Leu Asn Met Thr Gln Asp Pro Asn His Pro Ala Met Ala					
	530		535		540
Leu Asn Ala Arg Leu Ala Glu Val Glu Cys Leu Ala Glu Ser His Gln					
545		550		555	560
His Leu Ser Lys Glu Ser Leu Ala Gly Asn Lys Pro Ala Asn Ala Val					
	565		570		575
Leu His Lys Val Leu Asn Gln Leu Glu Glu Leu Leu Ser Asp Met Lys					
	580		585		590
Ala Asp Val Thr Arg Leu Pro Ser Met Leu Ser Arg Ile Pro Pro Val					
	595		600		605

Ala Ala Arg Leu Gln Met Ser Glu Arg Ser Ile Leu Ser Arg Leu Thr
610 615 620
Asn Arg Ala Gly Asp Pro Thr Ile Gln Gln Ile Ser Ser Arg Pro Arg
625 630 635 640
Asp Phe Pro Val Leu Gln Arg Ser Phe Pro Ala Glu Pro Arg Leu Pro
645 650 655
Gly His Leu Pro Asp Pro His Gly Arg Glu Lys Leu Pro Pro Phe
660 665 670

<210> 3887

<211> 794

<212> PRT

<213> Homo sapiens

<400> 3887

Met Gly Arg Lys Leu Asp Leu Ser Gly Leu Thr Asp Asp Glu Thr Glu
1 5 10 15
His Val Leu Gln Val Val Gln Arg Asp Phe Asn Leu Arg Lys Lys Glu
20 25 30
Glu Glu Arg Leu Ser Glu Leu Lys Gln Lys Leu Asp Glu Glu Gly Ser
35 40 45
Lys Cys Ser Ile Leu Ser Lys His Gln Gln Phe Val Glu His Cys Cys
50 55 60
Met Arg Cys Cys Ser Pro Phe Thr Phe Leu Val Asn Thr Lys Arg Gln
65 70 75 80
Cys Gly Asp Cys Lys Phe Asn Val Cys Lys Ser Cys Cys Ser Tyr Gln
85 90 95
Lys His Glu Lys Ala Trp Val Cys Cys Val Cys Gln Gln Ala Arg Leu
100 105 110
Leu Arg Ala Gln Ser Leu Glu Trp Phe Tyr Asn Asn Val Lys Ser Arg
115 120 125
Phe Lys Arg Phe Gly Ser Ala Lys Val Leu Lys Asn Leu Tyr Arg Lys
130 135 140
His Arg Leu Glu Ser Gly Ala Cys Phe Asp Ile Leu Gly Gly Ser Leu
145 150 155 160

Phe Glu Ser Asn Leu Glu Asn Glu Gly Ser Ile Ser Gly Ser Asp Ser
 165 170 175
 Thr Phe Tyr Arg Gln Ser Glu Gly His Ser Val Met Asp Thr Leu Ala
 180 185 190
 Val Ala Leu Arg Val Ala Glu Glu Ala Ile Glu Glu Ala Ile Ser Lys
 195 200 205
 Ala Glu Ala Tyr Gly Asp Ser Leu Asp Lys Gln Asn Glu Ala Ser Tyr
 210 215 220
 Leu Arg Asp His Lys Glu Glu Leu Thr Glu Glu Leu Ala Thr Thr Ile
 225 230 235 240
 Leu Gln Lys Ile Ile Arg Lys Gln Lys Ser Lys Ser Glu Gln Gln Val
 245 250 255
 Glu Glu Glu Pro Gly Trp Pro His Pro Gln Ser Cys Ser Thr Lys Val
 260 265 270
 Ala Asp Glu Gly Thr Ser Ala Ser Pro Gly Gly Tyr Arg Ala Pro Ala
 275 280 285
 Ala Leu Trp Arg Ser Gln Ser Ala Phe Ser Ile Thr Gly Glu Glu Ala
 290 295 300
 Leu Lys Thr Pro Pro Val Glu Ala Pro Ser Arg Gln Pro Arg Asp Gln
 305 310 315 320
 Gly Gln His Pro Arg Ala Glu Ser Ala Leu Pro Ser Trp Lys Ser Val
 325 330 335
 Asp Arg Leu Asp Glu Thr Asn Leu Ala Pro Val Leu Gln Ser Pro Asp
 340 345 350
 Gly Asn Trp Val Ala Leu Lys Asp Gly Ala Pro Pro Pro Thr Arg Leu
 355 360 365
 Leu Ala Lys Pro Lys Ser Gly Thr Phe Gln Ala Leu Glu Val Ala Ser
 370 375 380
 Ser Val Ala Ser Ala Tyr Asp Glu Met Gly Ser Asp Ser Glu Glu Asp
 385 390 395 400
 Phe Asp Trp Ser Glu Ala Leu Ser Lys Leu Cys Pro Arg Ser Arg Ala
 405 410 415
 Leu Pro Arg Asn Pro Gln Pro Gln Pro Thr Gln Ala Gln Ser Ser Asp
 420 425 430
 Gln Gly Pro Ile Ala Ala Ser Pro Ser Ser Ala Leu Ser Pro Asn Pro
 435 440 445

Glu Ala Met Cys Ser Asp Ser Glu Thr Ser Ser Ala Gly Ser Ser Arg
 450 455 460
 Glu Val Gly His Gln Ala Arg Leu Ser Trp Leu Gln Arg Lys Ala Pro
 465 470 475 480
 Arg Asn Pro Ala Ala Glu Lys Met Arg Leu His Gly Glu Leu Asp Val
 485 490 495
 Asn Phe Asn Pro Gln Leu Ala Ser Arg Glu Thr Ser Asp Ser Ser Glu
 500 505 510
 Pro Glu Glu Ala Pro His Thr Thr Asp Arg Arg Ala Arg Arg Trp Arg
 515 520 525
 Gly Ala Arg Leu Gly Ser Glu Gly Pro Ser Lys Glu Pro Ser Ser Pro
 530 535 540
 Ser Ala Gln Leu Arg Asp Leu Asp Thr His Gln Val Ser Asp Asp Leu
 545 550 555 560
 Ser Glu Thr Asp Ile Ser Asn Glu Ala Arg Asp Pro Gln Thr Leu Thr
 565 570 575
 Asp Thr Thr Glu Glu Lys Arg Arg Asn Arg Leu Tyr Glu Leu Ala Met
 580 585 590
 Lys Met Ser Glu Lys Glu Thr Ser Ser Gly Glu Asp Gln Glu Ser Glu
 595 600 605
 Pro Lys Thr Glu Ser Glu Asn Gln Lys Glu Ser Leu Ser Ser Glu Asp
 610 615 620
 Asn Ser Gln Ser Val Gln Glu Glu Leu Lys Lys Val Tyr Leu Ala Ala
 625 630 635 640
 Gly Thr Val Tyr Gly Leu Glu Thr Gln Leu Thr Glu Leu Glu Asp Ala
 645 650 655
 Ala Arg Cys Ile His Ser Gly Thr Asp Glu Thr His Leu Ala Asp Leu
 660 665 670
 Glu Asp Gln Val Ala Thr Ala Ala Ala Gln Val His His Ala Glu Leu
 675 680 685
 Gln Ile Ser Asp Ile Glu Ser Arg Ile Ser Ala Leu Thr Ile Ala Gly
 690 695 700
 Leu Asn Ile Ala Pro Cys Val Arg Phe Thr Arg Arg Arg Asp Gln Lys
 705 710 715 720
 Gln Arg Thr Gln Val Gln Thr Ile Asp Thr Ser Arg Gln Gln Arg Arg
 725 730 735

Lys Leu Pro Ala Pro Pro Val Lys Ala Glu Lys Ile Glu Thr Ser Ser
 740 745 750
 Val Thr Thr Ile Lys Thr Phe Asn His Asn Phe Ile Leu Gln Gly Ser
 755 760 765
 Ser Thr Asn Arg Thr Lys Glu Arg Lys Gly Thr Thr Lys Asp Leu Met
 770 775 780
 Glu Pro Ala Leu Glu Ser Ala Val Met Tyr
 785 790

<210> 3888

<211> 1233

<212> PRT

<213> Homo sapiens

<400> 3888

Met Gly Thr Arg Ala Phe Ser His Asp Ser Ile Phe Ile Pro Asp Gly
 1 5 10 15
 Gly Ala Glu Ser Glu Gln Thr Val Gln Ala Met Ser Gln Asp Asn Ile
 20 25 30
 Leu Gly Lys Val Lys Thr Leu Gln Gln Gln Leu Gly Lys Asn Ile Lys
 35 40 45
 Phe Gly Gln Arg Ser Pro Asn Ala Ile Pro Met Asn Lys Ala Asn Ser
 50 55 60
 Gly Glu Ala Ser Leu Glu Glu Asp Leu Phe Leu Thr Ser Pro Met Glu
 65 70 75 80
 Ile Val Thr Gln Gln Asp Ile Val Leu Ser Asp Ala Glu Asn Lys Ser
 85 90 95
 Ser Asp Thr Pro Ser Ser Leu Ser Pro Leu Asn Leu Pro Gly Ala Gly
 100 105 110
 Ser Glu Met Glu Glu Lys Val Ala Pro Val Lys Pro Ser Arg Pro Lys
 115 120 125
 Arg His Phe Ser Ser Ala Gly Thr Ile Glu Ser Val Asn Leu Asp Ala
 130 135 140
 Ile Pro Leu Ala Ile Ala Arg Leu Asp Asn Ser Ala Ala Lys His Lys
 145 150 155 160

Leu Ala Val Lys Pro Lys Lys Gln Arg Val Ser Lys Lys His Arg Arg			
165	170	175	
Leu Ala Gln Asp Pro Gln His Glu Gln Gly Gly Leu Glu Ser Arg Pro			
180	185	190	
Cys Leu Asp Gln Asn Gly His Pro Gly Glu Asp Lys Pro Thr Trp His			
195	200	205	
Glu Glu Glu Pro Asn Pro Leu Asp Ser Glu Glu Glu Arg Arg Arg Gln			
210	215	220	
Glu Asp Tyr Trp Arg Glu Leu Glu Ala Lys Cys Lys Arg Gln Lys Ala			
225	230	235	240
Glu Ala Ala Glu Lys Arg Arg Leu Glu Glu Gln Arg Leu Gln Ala Leu			
245	250	255	
Glu Arg Arg Leu Trp Glu Glu Asn Arg Arg Gln Glu Leu Leu Glu Glu			
260	265	270	
Glu Gly Glu Gly Gln Glu Pro Pro Leu Glu Ala Glu Arg Ala Pro Arg			
275	280	285	
Glu Glu Gln Gln Arg Ser Leu Glu Ala Pro Arg Trp Glu Asp Ala Glu			
290	295	300	
Arg Arg Glu Arg Glu Glu Arg Glu Arg Leu Glu Ala Glu Glu Glu Arg			
305	310	315	320
Arg Arg Leu Gln Ala Gln Ala Gln Ala Glu Glu Arg Arg Arg Leu Glu			
325	330	335	
Glu Asp Ala Arg Leu Glu Glu Arg Arg Arg Gln Glu Glu Glu Glu Gly			
340	345	350	
Arg Cys Ala Glu Glu Leu Lys Arg Gln Glu Glu Glu Glu Ala Glu Gly			
355	360	365	
Trp Glu Glu Leu Glu Gln Gln Glu Ala Glu Val Gln Gly Pro Pro Glu			
370	375	380	
Ala Leu Glu Glu Thr Gly Glu Gly Arg Arg Gly Ala Glu Glu Glu Asp			
385	390	395	400
Leu Gly Glu Glu Glu Glu Glu Gly Gln Ala His Leu Glu Asp Trp Arg			
405	410	415	
Gly Gln Leu Ser Glu Leu Leu Asn Asp Phe Glu Glu Arg Leu Glu Asp			
420	425	430	
Gln Glu Arg Leu Lys Pro Glu Gly Gln Arg Glu His Ser Glu Glu Pro			
435	440	445	

Gly Ile Cys Glu Glu Gln Asn Pro Glu Ala Glu Arg Arg Arg Glu Gln
 450 455 460
 Gln Gly Arg Ser Gly Asp Phe Gln Gly Ala Asp Arg Pro Gly Pro Glu
 465 470 475 480
 Glu Lys Arg Glu Glu Gly Asp Thr Glu Pro Leu Leu Lys Gln Glu Gly
 485 490 495
 Pro Val Glu Ala Ala Gln Pro Pro Val Glu Arg Lys Glu Ala Ala Ala
 500 505 510
 Leu Glu Gln Gly Arg Lys Val Glu Glu Leu Arg Trp Gln Glu Val Asp
 515 520 525
 Glu Arg Gln Thr Met Pro Arg Pro Tyr Thr Phe Gln Val Ser Ser Gly
 530 535 540
 Gly Lys Gln Ile Leu Phe Pro Lys Val Asn Leu Ser Pro Val Thr Pro
 545 550 555 560
 Ala Lys Asp Thr Gly Leu Thr Ala Ala Pro Gln Glu Pro Lys Ala Pro
 565 570 575
 Lys Ala Ser Pro Val Gln His Ala Leu Pro Ser Ser Leu Ser Val Pro
 580 585 590
 His Thr Ala Ile Leu Val Thr Gly Ala Gln Leu Cys Gly Pro Ala Val
 595 600 605
 Asn Leu Ser Gln Ile Lys Asp Thr Ala Cys Lys Ser Leu Leu Gly Leu
 610 615 620
 Glu Glu Lys Lys His Ala Glu Ala Pro Ala Gly Glu Asn Pro Pro Arg
 625 630 635 640
 Gly Pro Gly Asp Ala Arg Ala Gly Ser Gly Lys Ala Lys Leu Pro Gln
 645 650 655
 Glu Ser Pro Ser Ser Ala Ser Ala Leu Ala Glu Trp Ala Ser Ile Arg
 660 665 670
 Ser Arg Ile Leu Lys Asn Ala Glu Ser Asp Pro Arg Ser Ser Glu Arg
 675 680 685
 Asp Gln Leu Arg Pro Gly Asp Glu Ser Thr Pro Arg Gly Arg Cys Asp
 690 695 700
 Ser Arg Gly Asn Gln Arg Lys Thr Pro Pro Val Asn Ala Lys Phe Ser
 705 710 715 720
 Ile Met Pro Ala Trp Gln Lys Phe Ser Asp Gly Gly Thr Glu Thr Ser
 725 730 735

Lys Gln Ser Thr Glu Ala Glu Ser Ile Arg Lys Arg Pro Met Leu Gly
 740 745 750
 Pro Ser Glu Glu Thr Ala Pro Gln Pro Pro Pro Ala Gly Val Arg Glu
 755 760 765
 Leu Gly Lys Gly Pro Glu Lys Leu Gly Met His Arg Glu Pro Ala Asp
 770 775 780
 Thr Thr Glu Gly Cys Lys Phe Ala Lys Asp Leu Pro Ser Phe Leu Val
 785 790 795 800
 Pro Ser Leu Pro Tyr Pro Pro Gln Lys Val Val Ala His Thr Glu Phe
 805 810 815
 Thr Thr Ser Ser Asp Ser Glu Thr Ala Asn Gly Ile Ala Lys Pro Asp
 820 825 830
 Pro Val Met Pro Gly Gly Glu Glu Lys Ala Ser Pro Phe Gly Ile Lys
 835 840 845
 Leu Arg Arg Thr Asn Tyr Ser Leu Arg Phe Asn Cys Asp Gln Gln Ala
 850 855 860
 Glu Gln Lys Lys Lys Lys Arg His Ser Ser Thr Gly Asp Ser Ala Asp
 865 870 875 880
 Ala Gly Pro Pro Ala Ala Gly Ser Ala Arg Gly Glu Lys Glu Met Glu
 885 890 895
 Gly Val Ala Leu Lys His Gly Pro Ser Leu Pro Gln Glu Arg Lys Gln
 900 905 910
 Ala Pro Ser Thr Arg Arg Asp Ser Ala Glu Pro Ser Ser Ser Arg Ser
 915 920 925
 Val Pro Val Ala His Pro Gly Pro Pro Pro Ala Ser Ser Gln Thr Pro
 930 935 940
 Ala Pro Glu His Asp Lys Ala Ala Asn Lys Met Pro Leu Ala Gln Lys
 945 950 955 960
 Pro Ala Leu Ala Pro Lys Pro Thr Ser Gln Thr Pro Pro Ala Ser Pro
 965 970 975
 Leu Ser Lys Leu Ser Arg Pro Tyr Leu Val Glu Leu Leu Ser Arg Arg
 980 985 990
 Ala Gly Arg Pro Asp Pro Glu Pro Ser Glu Pro Ser Lys Glu Asp Gln
 995 1000 1005
 Glu Ser Ser Asp Arg Arg Pro Pro Ser Pro Pro Gly Pro Glu Glu Arg

1010	1015	1020	
Lys Gly Gln Lys Arg Asp Glu Glu Glu Glu Ala Thr Glu Arg Lys Pro			
1025	1030	1035	1040
Ala Ser Pro Pro Leu Pro Ala Thr Gln Gln Glu Lys Pro Ser Gln Thr			
1045	1050	1055	
Pro Glu Ala Gly Arg Lys Glu Lys Pro Met Leu Gln Ser Arg His Ser			
1060	1065	1070	
Leu Asp Gly Ser Lys Leu Thr Glu Lys Val Glu Thr Ala Gln Pro Leu			
1075	1080	1085	
Trp Ile Thr Leu Ala Leu Gln Lys Gln Lys Gly Phe Arg Glu Gln Gln			
1090	1095	1100	
Ala Thr Arg Glu Glu Arg Lys Gln Ala Arg Glu Ala Lys Gln Ala Glu			
1105	1110	1115	1120
Lys Leu Ser Lys Glu Asn Val Ser Val Ser Val Gln Pro Gly Ser Ser			
1125	1130	1135	
Ser Val Ser Arg Ala Gly Ser Leu His Lys Ser Thr Ala Leu Pro Glu			
1140	1145	1150	
Glu Lys Arg Pro Glu Thr Ala Val Ser Arg Leu Glu Arg Arg Glu Gln			
1155	1160	1165	
Leu Lys Lys Ala Asn Thr Leu Pro Thr Ser Val Thr Val Glu Ile Ser			
1170	1175	1180	
Asp Ser Ala Pro Pro Ala Pro Leu Val Lys Glu Val Thr Lys Arg Phe			
1185	1190	1195	1200
Ser Thr Pro Asp Ala Ala Pro Val Ser Thr Glu Pro Ala Trp Leu Ala			
1205	1210	1215	
Leu Ala Lys Arg Lys Ala Lys Ala Trp Ser Asp Cys Pro Gln Ile Ile			
1220	1225	1230	
Lys			

<210> 3889

<211> 133

<212> PRT

<213> Homo sapiens

<400> 3889

Met Leu Thr Asp Val Cys His Leu Val Thr Ser Phe Gln Val Phe Pro
 1 5 10 15
 Pro Pro Leu Ser Phe Leu Ser Ser Leu Leu Cys Cys Phe Lys Ile Cys
 20 25 30
 Met Ser Leu Thr Gly Met Pro Val Thr Ser Ala Asn Phe Val Ser Ser
 35 40 45
 Leu Pro His Glu Met Ile Leu Leu Lys Gly Thr Arg Tyr Val Ser Ile
 50 55 60
 Cys Thr Ser Leu Lys Ala Ser Gly Tyr Gly Pro Leu Thr His Trp Ser
 65 70 75 80
 Trp Leu Gln Asn Asn Ser Ala Glu Thr Ser Phe Gln Leu Lys Ile Pro
 85 90 95
 Ser Asn Val Thr Gln Gly Arg Asn Ile Ala Pro Ile Ile Lys Gly Gly
 100 105 110
 Asn Gly Gln Arg Gly Ser Ala Ala Gly Ser Gln Lys Arg Lys Val Arg
 115 120 125
 Val Leu Phe Ile Cys
 130

<210> 3890

<211> 172

<212> PRT

<213> Homo sapiens

<400> 3890

Met Gln Leu His Asp Arg Gly Leu Arg His Leu Phe Ser Ala Pro Ala
 1 5 10 15
 Gly Ser Arg Cys Asn Ser Ser Ala Gly Gly Arg Ser Tyr Pro Gln Ile
 20 25 30
 Asn Gly Arg Cys Asn Ser Ser Ala Gly Gly Arg Ser Tyr Pro Gln Ile
 35 40 45
 Asn Arg Arg Cys Asn Ser Ser Ala Gly Gly Arg Ser Tyr Pro Gln Ile
 50 55 60
 Asn Arg Arg Cys Asn Ser Ser Ala Gly Gly Arg Ser Tyr Ser Gln Met

65		70		75		80									
Asn	Arg	Arg	Cys	Asn	Ser	Ser	Ala	Gly	Gly	Arg	Ser	Tyr	Ser	Gln	Ile
		85				90							95		
Asn	Gly	Arg	Cys	Asn	Ser	Ser	Ala	Gly	Gly	Arg	Ser	Tyr	Pro	Gln	Ile
		100				105							110		
Asn	His	Trp	Cys	Asn	Ser	Ser	Ala	Gly	Gly	Arg	Ser	Tyr	Pro	Gln	Ile
		115				120							125		
Asn	Arg	Arg	Cys	Asn	Ser	Ser	Ala	Gly	Gly	Arg	Ser	Tyr	Pro	Gln	Ile
		130				135							140		
Asn	His	Trp	Cys	Asn	Ser	Ser	Ala	Gly	Gly	Arg	Ser	Tyr	Ser	Gln	Ile
145				150				155						160	
Asn	Cys	Arg	Cys	Asn	Ser	Ser	Ala	Gly	Gly	Arg	Arg				
				165				170							

<210> 3891

<211> 323

<212> PRT

<213> Homo sapiens

<400> 3891

Met	Ala	Phe	Ser	Ser	Ser	Gln	Ala	Pro	Tyr	Leu	Ser	Pro	Ala	Val	Pro
1			5					10					15		
Phe	Ser	Gly	Thr	Ile	Gln	Gly	Gly	Leu	Gln	Asp	Gly	Leu	Gln	Ile	Thr
			20					25					30		
Val	Asn	Gly	Thr	Val	Leu	Ser	Ser	Ser	Gly	Thr	Arg	Phe	Ala	Val	Asn
			35					40					45		
Phe	Gln	Thr	Gly	Phe	Ser	Gly	Asn	Asp	Ile	Ala	Phe	His	Phe	Asn	Pro
			50				55					60			
Arg	Phe	Glu	Asp	Gly	Gly	Tyr	Val	Val	Cys	Asn	Thr	Arg	Gln	Asn	Gly
65				70				75					80		
Ser	Trp	Gly	Pro	Glu	Glu	Arg	Lys	Thr	His	Met	Pro	Phe	Gln	Lys	Gly
				85				90					95		
Met	Pro	Phe	Asp	Leu	Cys	Phe	Leu	Val	Gln	Ser	Ser	Asp	Phe	Lys	Val
			100					105					110		
Met	Val	Asn	Gly	Ile	Leu	Phe	Val	Gln	Tyr	Phe	His	Arg	Val	Pro	Phe

115	120	125
His Arg Val Asp Thr Ile Ser Val Asn Gly Ser Val Gln Leu Ser Tyr		
130	135	140
Ile Ser Phe Gln Pro Pro Gly Val Trp Pro Ala Asn Pro Ala Pro Ile		
145	150	155
Thr Gln Thr Val Ile His Thr Val Gln Ser Ala Pro Gly Gln Met Phe		
165	170	175
Ser Thr Pro Ala Ile Pro Pro Met Met Tyr Pro His Pro Ala Tyr Pro		
180	185	190
Met Pro Phe Ile Thr Thr Ile Leu Gly Gly Leu Tyr Pro Ser Lys Ser		
195	200	205
Ile Leu Leu Ser Gly Thr Val Leu Pro Ser Ala Gln Arg Phe His Ile		
210	215	220
Asn Leu Cys Ser Gly Asn His Ile Ala Phe His Leu Asn Pro Arg Phe		
225	230	235
Asp Glu Asn Ala Val Val Arg Asn Thr Gln Ile Asp Asn Ser Trp Gly		
245	250	255
Ser Glu Glu Arg Ser Leu Pro Arg Lys Met Pro Phe Val Arg Gly Gln		
260	265	270
Ser Phe Ser Val Trp Ile Leu Cys Glu Ala His Cys Leu Lys Val Ala		
275	280	285
Val Asp Gly Gln His Leu Phe Glu Tyr Tyr His Arg Leu Arg Asn Leu		
290	295	300
Pro Thr Ile Asn Arg Leu Glu Val Gly Gly Asp Ile Gln Leu Thr His		
305	310	315
Val Gln Thr		320

<210> 3892

<211> 209

<212> PRT

<213> Homo sapiens

<400> 3892

Met Pro Ser Met Leu Val Val Asn Val His Leu Ala Pro Gly Arg Ala

1	5	10	15
Asn Pro His Gly Val Cys Val Asn Thr Ser Leu Asn His Ser Leu Ile			
20	25	30	
Tyr Pro Ile Phe Val Val His Val Ser Arg Ile Gln Cys Leu Cys Ser			
35	40	45	
Arg Ile Trp Phe Ser Leu His Val Phe Gly Val Cys Ala Tyr Arg Cys			
50	55	60	
Ala Trp Cys Gly Leu Ser Pro Arg Pro Val Cys Lys Arg His Pro Thr			
65	70	75	80
Gln Arg Pro Arg Gln Asp Pro Gly Leu Trp Ala Val Val Pro Gly Leu			
85	90	95	
Pro Leu Gln Gly Arg Cys Val Leu Leu Arg Glu His Pro Cys Leu Gly			
100	105	110	
Ser Asn Pro Gly Ser Gly Arg Gln Val Val Gly Val Ala Ala Ser Ser			
115	120	125	
Ala Ser Leu Asp Asp Ala Gln Glu His Ala Gln Ser Gln Arg Ala Gln			
130	135	140	
Leu Leu Gly Ser Leu Thr Leu Gly Trp Ala Leu Gly Arg Gln Pro Phe			
145	150	155	160
Gly Glu Cys Val Leu Met Val Val Ser Gly Val Ser Leu Thr Asn Asn			
165	170	175	
Pro Pro Cys Pro Leu Asp Thr Gly Val Pro Ser Ser Leu Ala Val Phe			
180	185	190	
Leu Ile Arg Val Pro His Arg Pro Thr Ala Arg Cys Val Ser Pro Asp			
195	200	205	
Leu			

<210> 3893

<211> 465

<212> PRT

<213> Homo sapiens

<400> 3893

Met Gly Val Glu Ala Val Met Ala Leu Leu Glu Gly Thr Pro Asp Thr

1	5	10	15												
Pro	Ala	Cys	Val	Val	Ser	Leu	Ser	Gly	Asn	Gln	Ala	Val	Arg	Leu	Pro
	20							25					30		
Leu	Met	Glu	Cys	Val	Gln	Val	Thr	Lys	Asp	Val	Thr	Lys	Ala	Met	Asp
	35							40					45		
Glu	Lys	Lys	Phe	Asp	Glu	Ala	Leu	Lys	Leu	Arg	Gly	Arg	Ser	Phe	Met
	50						55					60			
Asn	Asn	Trp	Glu	Val	Tyr	Lys	Leu	Leu	Ala	His	Val	Arg	Pro	Pro	Val
65					70					75				80	
Ser	Lys	Ser	Gly	Ser	His	Thr	Val	Ala	Val	Met	Asn	Val	Gly	Ala	Pro
				85					90				95		
Ala	Ala	Gly	Met	Asn	Ala	Ala	Val	Arg	Ser	Thr	Val	Arg	Ile	Gly	Leu
	100							105				110			
Ile	Gln	Gly	Asn	Arg	Val	Leu	Val	Val	His	Asp	Gly	Phe	Glu	Gly	Leu
	115						120					125			
Ala	Lys	Gly	Gln	Ile	Glu	Glu	Ala	Gly	Trp	Ser	Tyr	Val	Gly	Gly	Trp
	130						135				140				
Thr	Asp	Gln	Gly	Gly	Ser	Lys	Leu	Gly	Thr	Lys	Arg	Thr	Leu	Pro	Lys
145					150					155				160	
Lys	Ser	Phe	Glu	Gln	Ile	Ser	Ala	Asn	Ile	Thr	Lys	Phe	Asn	Ile	Gln
			165					170				175			
Gly	Leu	Val	Ile	Ile	Gly	Gly	Phe	Glu	Ala	Tyr	Thr	Gly	Gly	Leu	Glu
	180						185				190				
Leu	Met	Glu	Gly	Arg	Lys	Gln	Phe	Asp	Glu	Leu	Cys	Ile	Pro	Phe	Val
	195						200				205				
Val	Ile	Pro	Ala	Thr	Val	Ser	Asn	Asn	Val	Pro	Gly	Ser	Asp	Phe	Ser
	210					215				220					
Val	Gly	Ala	Asp	Thr	Ala	Leu	Asn	Thr	Ile	Cys	Thr	Thr	Cys	Asp	Arg
225					230				235				240		
Ile	Lys	Gln	Ser	Ala	Ala	Gly	Thr	Lys	Arg	Arg	Val	Phe	Ile	Ile	Glu
			245					250				255			
Thr	Met	Gly	Gly	Tyr	Cys	Gly	Tyr	Leu	Ala	Thr	Met	Ala	Gly	Leu	Ala
	260						265				270				
Ala	Gly	Ala	Asp	Ala	Ala	Tyr	Ile	Phe	Glu	Glu	Pro	Phe	Thr	Ile	Arg
	275					280					285				
Asp	Leu	Gln	Ala	Asn	Val	Glu	His	Leu	Val	Gln	Lys	Met	Lys	Thr	Thr

290 295 300
 Val Lys Arg Gly Leu Val Leu Arg Asn Glu Lys Cys Asn Glu Asn Tyr
 305 310 315 320
 Thr Thr Asp Phe Ile Phe Asn Leu Tyr Ser Glu Glu Gly Lys Gly Ile
 325 330 335
 Phe Asp Ser Arg Lys Asn Val Leu Gly His Met Gln Gln Gly Gly Ser
 340 345 350
 Pro Thr Pro Phe Asp Arg Asn Phe Ala Thr Lys Met Gly Ala Lys Ala
 355 360 365
 Met Asn Trp Met Ser Gly Lys Ile Lys Glu Ser Tyr Arg Asn Gly Arg
 370 375 380
 Ile Phe Ala Asn Thr Pro Asp Ser Gly Cys Val Leu Gly Met Arg Lys
 385 390 395 400
 Arg Ala Leu Val Phe Gln Pro Val Ala Glu Leu Lys Asp Gln Thr Asp
 405 410 415
 Phe Glu His Arg Ile Pro Lys Glu Gln Trp Trp Leu Lys Leu Arg Pro
 420 425 430
 Ile Leu Lys Ile Leu Ala Lys Tyr Glu Ile Asp Leu Asp Thr Ser Asp
 435 440 445
 His Ala His Leu Glu His Ile Thr Arg Lys Arg Ser Gly Glu Ala Ala
 450 455 460
 Val
 465

<210> 3894

<211> 158

<212> PRT

<213> Homo sapiens

<400> 3894

Met Thr Asp Gly Thr Asn Trp Pro Gln Gln Ile His Ser Arg Ala Ser
 1 5 10 15
 Thr Ser Leu Ala Ser Pro Ser His Pro Gly Leu Arg Ser Thr Gly Leu
 20 25 30
 Glu Ala Gly Pro Gln Val His Arg Val Glu Ala Ala Trp Leu Gln Glu

35	40	45
Ser Asp Gly Gly Val Arg Pro Leu Arg Leu Ser Gln Pro Ala Cys Trp		
50	55	60
Pro Cys Leu Pro Arg His Arg Glu Gly Trp Cys Thr Ser Pro Arg Gln		
65	70	75
Asp Cys Glu Pro Glu Arg Gly Gly Met Glu Val Glu Leu Glu Pro Cys		
85	90	95
Pro His Leu Ser Leu Leu Ile Arg Gly Gly Pro Val Gly Phe Leu Pro		
100	105	110
Ala Gly Ser Pro Arg Ala Ala Trp Lys Ala Leu Ile Gly Arg Ala Leu		
115	120	125
Val Ala Val Thr Trp Lys Leu Ala Val Leu Gly Arg Gly Ala Phe Cys		
130	135	140
Ser Phe Gln Gly His Ser Val Phe Leu His Ala Asp Pro Leu		
145	150	155

<210> 3895

<211> 101

<212> PRT

<213> Homo sapiens

<400> 3895

Met Gly Ser Ser Gly Leu Leu Ser Leu Leu Val Leu Phe Val Leu Leu		
1	5	10
Ala Asn Val Gln Gly Pro Gly Leu Thr Asp Trp Leu Phe Pro Arg Arg		
20	25	30
Cys Pro Lys Ile Arg Glu Glu Cys Glu Phe Gln Glu Arg Asp Val Cys		
35	40	45
Thr Lys Asp Arg Gln Cys Gln Asp Asn Lys Lys Cys Cys Val Phe Ser		
50	55	60
Cys Glu Lys Lys Cys Leu Asp Leu Lys Gln Gly Asn Ile Gln Ser Cys		
65	70	75
Arg Ile Thr Asn Pro Ser Ser Pro Cys Pro His Leu Leu Pro Ser Trp		
85	90	95
Thr Gly Phe Val Pro		

100

<210> 3896

<211> 1315

<212> PRT

<213> Homo sapiens

<400> 3896

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Met Asn Phe Leu Ser Thr Ala Glu Ser Arg Thr Ala Gln Ala Ala Ala
  1             5             10             15
Ser Gly Thr Thr Leu Leu Pro Gln Phe Arg Ala Pro Ser Trp Gln Thr
          20             25             30
Gly Met His Ser Ser Ala Ala Thr Glu Leu Phe Ala Thr Gly Pro Leu
          35             40             45
Pro Ser Thr Gly Thr Leu Pro Pro Ser Leu Ser Ala Tyr Gln His Pro
          50             55             60
Thr Thr Phe Ser Asn Arg Asn Phe Ala Thr Thr Ser Pro Leu Val Leu
          65             70             75             80
Gln Asp Ser Thr Phe Asn Thr Thr Ser Asn Gly Ile Leu Ser His His
          85             90             95
Asp Pro Leu Leu Gln Ile Lys Thr Ser Gln Gly Thr Val Pro Thr Ala
          100            105            110
Leu Ala Phe Glu Arg Leu Gly Ser Ser Val Leu Ser Asn Ser Ile Pro
          115            120            125
Pro Gln Ser Ser Thr Tyr Arg Ser Ala Gln Glu Ser Ala Pro His Leu
          130            135            140
Leu Gln Pro Gln Phe Ser Leu Leu Pro Ser Ala Leu Gly Gly Ser Gln
          145            150            155            160
Gln Thr Pro Gln Ala Tyr Ser Ser Thr Leu Phe Thr Ser Ser Thr Ala
          165            170            175
Ser Ile Glu Arg Ala Leu Leu Arg Glu Cys Ser Val Ile Lys His His
          180            185            190
Gln Arg Pro Ser Gly Thr Gln Ser Ile Gln Ala Gln Leu Thr Gly Ser
          195            200            205
Gln His Ser Leu His Ser Tyr Leu Ser Asn Ser Ser Val Val Asn Phe

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210	215	220	
Gln Glu Thr Thr Arg Gln Ser Ser Leu Ser Cys Ser Pro Ile Gly Asp			
225	230	235	240
Ser Thr Gln Asn Leu Pro Asp Ser Ser Pro Thr Gln Asn Tyr Ile Ser			
	245	250	255
Met His Ser Ser Gln Asn Val Gln Thr Gln Glu Ser Ser Ser Pro Gln			
	260	265	270
Ser Gln Lys Phe Leu Pro Ala Val Gln Ser Ser Ser Phe Ala Ser Ser			
	275	280	285
Thr His Cys Gln Thr Leu Gln Asn Asn Ile Thr Ser Pro Asp Pro Lys			
	290	295	300
Ser Tyr Ala Glu Arg Lys Leu Asp Ser Asp Val Tyr Pro Ser Ser Lys			
305	310	315	320
Gln Glu Asp Gly Phe Pro Met Gln Glu Leu Gln Val Leu Gln Pro Gln			
	325	330	335
Ala Ser Leu Glu Ser Ser Thr Gln Arg Leu Ser Asp Gly Glu Ile Asn			
	340	345	350
Ala Gln Glu Ser Thr Tyr Lys Val Ser Lys Ala Asp Asp Arg Tyr Ser			
	355	360	365
Gln Ser Val Ile Arg Ser Asn Ser Arg Leu Glu Asp Gln Val Ile Gly			
	370	375	380
Val Ala Leu Gln Ala Ser Lys Lys Glu Glu Ser Val Val Gly Ser Val			
385	390	395	400
Thr Gln Leu Asn Gln Gln Ile Gly Gln Val Asn Asn Ala Ala Thr Leu			
	405	410	415
Asp Leu Lys Asn Ser Thr Asn Leu Ile Gln Thr Pro Gln Ile Arg Leu			
	420	425	430
Asn Thr Lys Asp Leu Lys Gln Gln His Pro Leu Ile Leu Lys Val His			
	435	440	445
Glu Ser Lys Val Gln Glu Gln His Asp Gln Ile Ile Asn Ala Ser Ser			
	450	455	460
Gln Ile Gln Ile Pro Asn His Ala Leu Gly His Gly His Gln Ala Ser			
465	470	475	480
Leu Pro Asn Thr Gln Val Leu Leu Asp Ser Ala Cys Asp Leu Gln Ile			
	485	490	495
Leu Gln Gln Ser Ile Leu Gln Ala Gly Leu Gly Gln Val Lys Ala Ser			

500	505	510
Leu Gln Ala Gln Arg Val Gln Ser Pro Gln Gln Ile Val His Pro Phe		
515	520	525
Leu Gln Met Glu Gly His Val Ile Gln Ser Asn Gly Asp His Ser Gln		
530	535	540
Gln Gln Leu His Pro Gln Asn Ser Glu Val Met Lys Met Asp Leu Ser		
545	550	555
Glu Ser Ser Lys Pro Leu Gln Gln His Leu Thr Thr Lys Gly His Phe		
565	570	575
Ser Glu Thr Asn Gln His Asp Ser Lys Asn Gln Phe Val Ser Leu Gly		
580	585	590
Ser Met Cys Phe Pro Glu Ala Val Leu Leu Ser Asp Glu Arg Asn Ile		
595	600	605
Leu Ser Asn Val Asp Asp Ile Leu Ala Ala Thr Ala Ala Ala Cys Gly		
610	615	620
Val Thr Pro Thr Asp Phe Ser Lys Ser Thr Ser Asn Glu Thr Met Gln		
625	630	635
Ala Val Glu Asp Gly Asp Ser Lys Ser His Phe Gln Gln Ser Leu Asp		
645	650	655
Val Arg His Val Thr Ser Asp Phe Asn Ser Met Thr Ala Thr Val Gly		
660	665	670
Lys Pro Gln Asn Ile Asn Asp Thr Ser Leu Asn Gly Asn Gln Val Thr		
675	680	685
Val Asn Leu Ser Pro Val Pro Ala Leu Gln Ser Lys Met Thr Leu Asp		
690	695	700
Gln Gln His Ile Glu Thr Pro Gly Gln Asn Ile Pro Thr Lys Val Thr		
705	710	715
Ser Ala Val Val Gly Pro Ser His Glu Val Gln Glu Gln Ser Ser Gly		
725	730	735
Pro Phe Lys Lys Gln Ser Ala Thr Asn Leu Glu Ser Glu Glu Asp Ser		
740	745	750
Glu Ala Pro Val Asp Ser Thr Leu Asn Asn Asn Arg Asn Gln Glu Phe		
755	760	765
Val Ser Ser Ser Arg Ser Ile Ser Gly Glu Ser Ala Thr Ser Glu Ser		
770	775	780
Glu Phe Thr Leu Gly Gly Asp Asp Ser Gly Val Ser Met Asn Pro Ala		

785	790	795	800
Arg Ser Ala Leu Ala Leu Leu Ala Met Ala Gln Ser Gly Asp Ala Val			
805	810	815	
Ser Val Lys Ile Glu Glu Glu Asn Gln Asp Leu Met His Phe Asn Leu			
820	825	830	
Gln Lys Lys Arg Ala Lys Gly Lys Gly Gln Val Lys Glu Glu Asp Asn			
835	840	845	
Ser Asn Gln Lys Gln Leu Lys Arg Pro Ala Gln Gly Lys Arg Gln Asn			
850	855	860	
Pro Arg Gly Thr Asp Ile Tyr Leu Pro Tyr Thr Pro Pro Ser Ser Glu			
865	870	875	880
Ser Cys His Asp Gly Tyr Gln His Gln Glu Lys Met Arg Gln Lys Ile			
885	890	895	
Lys Glu Val Glu Glu Lys Gln Pro Glu Val Lys Thr Gly Phe Ile Ala			
900	905	910	
Ser Phe Leu Asp Phe Leu Lys Ser Gly Pro Lys Gln Gln Phe Ser Thr			
915	920	925	
Leu Ala Val Arg Met Pro Asn Arg Thr Arg Arg Pro Gly Thr Gln Met			
930	935	940	
Val Arg Thr Phe Cys Pro Pro Pro Leu Pro Lys Pro Ser Ser Thr Thr			
945	950	955	960
Pro Thr Pro Leu Val Ser Glu Thr Gly Gly Asn Ser Pro Ser Asp Lys			
965	970	975	
Val Asp Asn Glu Leu Lys Asn Leu Glu His Leu Ser Ser Phe Ser Ser			
980	985	990	
Asp Glu Asp Asp Pro Gly Tyr Ser Gln Asp Ala Tyr Lys Ser Val Ser			
995	1000	1005	
Thr Pro Leu Thr Thr Leu Asp Ala Thr Ser Asp Lys Lys Lys Lys Thr			
1010	1015	1020	
Glu Ala Leu Gln Val Ala Thr Thr Ser Pro Thr Ala Asn Thr Thr Gly			
1025	1030	1035	1040
Thr Ala Thr Thr Ser Ser Thr Thr Val Gly Ala Val Lys Gln Glu Pro			
1045	1050	1055	
Leu His Ser Thr Ser Tyr Ala Val Asn Ile Leu Glu Asn Ile Ser Ser			
1060	1065	1070	
Ser Glu Ser Ser Lys Pro Ile Glu Leu Asp Gly Leu Pro Ser Asp Gln			

1075	1080	1085	
Phe Ala Lys Gly Gln Asp Thr Val	Ala Ile Glu Gly Phe Thr Asp Glu		
1090	1095	1100	
Glu Asp Thr Glu Ser Gly Gly Glu Gly Gln Tyr Arg Glu Arg Asp Glu			
1105	1110	1115	1120
Phe Val Val Lys Ile Glu Asp Ile Glu Thr Phe Lys Glu Ala Leu Lys			
1125	1130	1135	
Thr Gly Lys Glu Pro Pro Ala Ile Trp Lys Val Gln Lys Ala Leu Leu			
1140	1145	1150	
Gln Lys Phe Val Pro Glu Ile Arg Asp Gly Gln Arg Glu Phe Ala Ala			
1155	1160	1165	
Thr Asn Ser Tyr Leu Gly Tyr Phe Gly Asp Ala Lys Ser Lys Tyr Lys			
1170	1175	1180	
Arg Ile Tyr Val Lys Phe Ile Glu Asn Ala Asn Lys Lys Glu Tyr Val			
1185	1190	1195	1200
Arg Val Cys Ser Lys Lys Pro Arg Asn Lys Pro Ser Gln Thr Ile Arg			
1205	1210	1215	
Thr Val Gln Ala Lys Pro Ser Ser Ser Ser Lys Thr Ser Asp Pro Leu			
1220	1225	1230	
Ala Ser Lys Thr Thr Thr Thr Lys Ala Pro Ser Val Lys Pro Lys Val			
1235	1240	1245	
Lys Gln Pro Lys Val Lys Ala Glu Pro Pro Pro Lys Lys Arg Lys Lys			
1250	1255	1260	
Trp Lys Glu Glu Phe Ser Ser Ser Gln Ser Asp Ser Ser Pro Glu Ile			
1265	1270	1275	1280
His Thr Ser Ser Ser Asp Asp Glu Glu Phe Glu Pro Pro Ala Pro Phe			
1285	1290	1295	
Val Thr Arg Phe Leu Asn Thr Arg Ala Met Lys Glu Thr Phe Lys Ser			
1300	1305	1310	
Tyr Met Glu			
1315			

<210> 3897

<211> 166

<212> PRT

<213> Homo sapiens

<400> 3897

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Met Ala Leu Gln Ala Leu Ala Arg Leu Pro Arg Leu Glu Gly Gly Ser
  1              5              10              15
Gly Asn Ser Lys Val Gly Phe Ser Ser Gly Trp Ser Ala Phe Leu Pro
      20              25              30
Arg Arg Leu Gly Ser Gly Ile Ser Gly Phe Phe Cys Arg Ile Glu Thr
      35              40              45
Cys Pro Trp Ala Leu Thr Leu Asn Thr Gly Arg Ser Ala Ala Cys Cys
      50              55              60
Leu Ser Val Ala Trp Pro Leu His Pro Pro Ser Pro Ser Pro Cys Tyr
      65              70              75              80
Pro Val Arg Arg Val Arg Gln Ser Leu His Pro Ser Ser Ser Trp Gly
      85              90              95
Gly Arg Ser Ala Glu Ala Ser Gly Asp Leu Leu Arg Gly Val Cys Leu
      100             105             110
Ala Arg Asp Val Ser Ile Pro His Arg Gln Gly Arg Cys Leu Pro Arg
      115             120             125
Ser Pro Trp Gly Ser Ala Gly Val Asn Ala Ala Leu Gln Gly Gly Arg
      130             135             140
Gly Arg Ala Ser Ser Gly Gly Gly Gly Gly Ala Gln Gly Val Gln Leu
      145             150             155             160
Gly His Lys Leu Thr Ala
      165

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<210> 3898

<211> 803

<212> PRT

<213> Homo sapiens

<400> 3898

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Met Pro Trp Val Glu Pro Lys Pro Arg Pro Gly Pro Glu Gln Lys Pro
  1              5              10              15

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Lys Leu Thr Lys Pro Asp Ser Ala Thr Gly Pro Gln Trp Tyr Gln Glu
 20 25 30
 Ser Gln Glu Ser Glu Ser Glu Gly Lys Gln Pro Pro Pro Gly Pro Leu
 35 40 45
 Ala Pro Pro Lys Ser Pro Glu Pro Ser Gly Pro Leu Ala Ser Glu Gln
 50 55 60
 Asp Ala Pro Leu Pro Glu Gly Asp Asp Ala Pro Pro Arg Pro Ser Met
 65 70 75 80
 Leu Asp Asp Ala Pro Arg Leu Pro Leu Glu Leu Asp Asp Ala Pro Leu
 85 90 95
 Pro Glu Glu Glu Thr Pro Glu Pro Thr Ala Ile Cys Arg His Arg His
 100 105 110
 Arg Cys His Thr Asp Cys Leu Glu Gly Leu Leu Ser Arg Thr Phe Gln
 115 120 125
 Trp Leu Gly Trp Gln Val Gly Ala His Pro Trp Ile Phe Leu Leu Ala
 130 135 140
 Pro Leu Met Leu Thr Ala Ala Leu Gly Thr Gly Phe Leu Tyr Leu Pro
 145 150 155 160
 Lys Asp Glu Glu Glu Asp Leu Glu Glu His Tyr Thr Pro Val Gly Ser
 165 170 175
 Pro Ala Lys Ala Glu Arg Arg Phe Val Gln Gly His Phe Thr Thr Asn
 180 185 190
 Asp Ser Tyr Arg Phe Ser Ala Ser Arg Arg Ser Thr Glu Ala Asn Phe
 195 200 205
 Val Ser Leu Leu Val Val Ser Tyr Ser Asp Ser Leu Leu Asp Pro Ala
 210 215 220
 Thr Phe Ala Glu Val Ser Lys Leu Asp Gly Ala Val Gln Asp Leu Arg
 225 230 235 240
 Val Ala Arg Glu Lys Gly Ser Gln Ile Gln Tyr Gln Gln Val Cys Ala
 245 250 255
 Arg Tyr Arg Ala Leu Cys Val Pro Pro Asn Pro Ile Leu Tyr Ala Trp
 260 265 270
 Gln Val Asn Lys Thr Leu Asn Leu Ser Ser Ile Ser Phe Pro Ala Tyr
 275 280 285
 Asn His Gly Arg His Pro Leu Tyr Leu Thr Gly Phe Phe Gly Gly Tyr

290	295	300	
Ile Leu Gly Gly Ser	Leu Gly Met Gly Gln	Leu Leu Leu Arg	Ala Lys
305	310	315	320
Ala Met Arg Leu Leu Tyr Tyr	Leu Lys Thr Glu Asp	Pro Glu Tyr Asp	
	325	330	335
Val Gln Ser Lys Gln Trp	Leu Thr His Leu Leu Asp	Gln Phe Thr Asn	
	340	345	350
Ile Lys Asn Ile Leu Ala Leu	Lys Lys Ile Glu Val Val	His Phe Thr	
	355	360	365
Ser Leu Ser Arg Gln Leu Glu	Phe Glu Ala Thr Ser Val	Thr Val Ile	
	370	375	380
Pro Val Phe His Leu Ala Tyr	Ile Leu Ile Ile Leu Phe	Ala Val Thr	
	385	390	395
Ser Cys Phe Gly Phe Asp Cys	Ile Arg Asn Lys Met Cys	Val Ala Ala	
	405	410	415
Phe Gly Val Ile Ser Ala Phe	Leu Ala Val Val Ser Gly	Phe Gly Leu	
	420	425	430
Leu Leu His Ile Gly Val Pro	Phe Val Ile Ile Val Ala	Asn Ser Pro	
	435	440	445
Phe Leu Ile Leu Gly Val Gly	Val Asp Asp Met Phe Ile	Met Ile Ser	
	450	455	460
Ala Trp His Lys Thr Asn Leu	Ala Gly Asp Ile Arg Glu	Arg Met Ser	
	465	470	475
Asn Val Tyr Ser Lys Ala Ala	Val Ser Ile Thr Ile Thr	Thr Ile Thr	
	485	490	495
Asn Ile Leu Ala Leu Tyr Thr	Gly Ile Met Ser Ser Phe	Arg Ser Val	
	500	505	510
Gln Cys Phe Cys Ile Tyr Thr	Gly Thr Thr Leu Leu Phe	Cys Tyr Phe	
	515	520	525
Tyr Asn Ile Thr Cys Phe Gly	Ala Phe Met Ala Leu Asp	Gly Lys Arg	
	530	535	540
Glu Val Val Cys Leu Cys Trp	Leu Lys Lys Ala Asp Pro	Lys Trp Pro	
	545	550	555
Ser Phe Lys Lys Phe Cys Cys	Phe Pro Phe Gly Ser Val	Pro Asp Glu	
	565	570	575
His Gly Thr Asp Ile His Pro	Met Ser Leu Phe Phe Arg	Asp Tyr Phe	

580	585	590
Gly Pro Phe Leu Thr Arg Ser Glu Ser Lys Tyr Phe Val Val Phe Ile		
595	600	605
Tyr Val Leu Tyr Ile Ile Ser Ser Ile Tyr Gly Cys Phe His Val Gln		
610	615	620
Glu Gly Leu Asp Leu Arg Asn Leu Ala Ser Asp Asp Ser Tyr Ile Thr		
625	630	635
Pro Tyr Phe Asn Val Glu Glu Asn Tyr Phe Ser Asp Tyr Gly Pro Arg		
645	650	655
Val Met Val Ile Val Thr Lys Lys Val Asp Tyr Trp Asp Lys Asp Val		
660	665	670
Arg Gln Lys Leu Glu Asn Cys Thr Lys Ile Phe Glu Lys Asn Val Tyr		
675	680	685
Val Asp Lys Asn Leu Thr Glu Phe Trp Leu Asp Ala Tyr Val Gln Tyr		
690	695	700
Leu Lys Gly Asn Ser Gln Asp Pro Asn Glu Lys Asn Thr Phe Met Asn		
705	710	715
Asn Ile Pro Asp Phe Leu Ser Asn Phe Pro Asn Phe Gln His Asp Ile		
725	730	735
Asn Ile Ser Ser Ser Asn Glu Ile Ile Ser Ser Arg Gly Phe Ile Gln		
740	745	750
Thr Thr Asp Val Ser Ser Ser Ala Lys Lys Lys Ile Leu Leu Phe Gln		
755	760	765
Leu Arg Arg Ile Ala Glu Asp Cys Gln Ile Pro Leu Met Val Tyr Asn		
770	775	780
Gln Ala Phe Ile Tyr Phe Asp Gln Tyr Ala Ala Ile Leu Glu Asp Thr		
785	790	795
Val Arg Asn		800

<210> 3899

<211> 520

<212> PRT

<213> Homo sapiens

<400> 3899

Met Glu Phe His Asn Gly Gly His Val Ser Gly Ile Gly Gly Phe Leu
 1 5 10 15
 Val Ser Leu Thr Ser Arg Met Lys Pro His Thr Leu Ala Val Thr Pro
 20 25 30
 Ala Leu Ile Phe Ala Ile Thr Val Ala Thr Ile Gly Ser Phe Gln Phe
 35 40 45
 Gly Tyr Asn Thr Gly Val Ile Asn Ala Pro Glu Thr Ile Ile Lys Glu
 50 55 60
 Phe Ile Asn Lys Thr Leu Thr Asp Lys Ala Asn Ala Pro Pro Ser Glu
 65 70 75 80
 Val Leu Leu Thr Asn Leu Trp Ser Leu Ser Val Ala Ile Phe Ser Val
 85 90 95
 Gly Gly Met Ile Gly Ser Phe Ser Val Gly Leu Phe Val Asn Arg Phe
 100 105 110
 Gly Arg Arg Asn Ser Met Leu Ile Val Asn Leu Leu Ala Ala Thr Gly
 115 120 125
 Gly Cys Leu Met Gly Leu Cys Lys Ile Ala Glu Ser Val Glu Met Leu
 130 135 140
 Ile Leu Gly Arg Leu Val Ile Gly Leu Phe Cys Gly Leu Cys Thr Gly
 145 150 155 160
 Phe Val Pro Met Tyr Ile Gly Glu Ile Ser Pro Thr Ala Leu Arg Gly
 165 170 175
 Ala Phe Gly Thr Leu Asn Gln Leu Gly Ile Val Ile Gly Ile Leu Val
 180 185 190
 Ala Gln Ile Phe Gly Leu Glu Leu Ile Leu Gly Ser Glu Glu Leu Trp
 195 200 205
 Pro Val Leu Leu Gly Phe Thr Ile Leu Pro Ala Ile Leu Gln Ser Ala
 210 215 220
 Ala Leu Pro Cys Cys Pro Glu Ser Pro Arg Phe Leu Leu Ile Asn Arg
 225 230 235 240
 Lys Lys Glu Glu Asn Ala Thr Arg Ile Leu Gln Arg Leu Trp Gly Thr
 245 250 255
 Gln Asp Val Ser Gln Asp Ile Gln Glu Met Lys Asp Glu Ser Ala Arg
 260 265 270
 Met Ser Gln Glu Lys Gln Val Thr Val Leu Glu Leu Phe Arg Val Ser

275	280	285
Ser Tyr Arg Gln Pro Ile Ile Ile Ser Ile Val Leu Gln Leu Ser Gln		
290	295	300
Gln Leu Ser Gly Ile Asn Ala Val Phe Tyr Tyr Ser Thr Gly Ile Phe		
305	310	315
Lys Asp Ala Gly Val Gln Gln Pro Ile Tyr Ala Thr Ile Ser Ala Gly		
325	330	335
Val Val Asn Thr Ile Phe Thr Leu Leu Ser Leu Phe Leu Val Glu Arg		
340	345	350
Ala Gly Arg Arg Thr Leu His Met Ile Gly Leu Gly Gly Met Ala Phe		
355	360	365
Cys Ser Thr Leu Met Thr Val Ser Leu Leu Leu Lys Asn His Tyr Asn		
370	375	380
Gly Met Ser Phe Val Cys Ile Gly Ala Ile Leu Val Phe Val Ala Cys		
385	390	395
Phe Glu Ile Gly Pro Gly Pro Ile Pro Trp Phe Ile Val Ala Glu Leu		
405	410	415
Phe Ser Gln Gly Pro Arg Pro Ala Ala Met Ala Val Ala Gly Cys Ser		
420	425	430
Asn Trp Thr Ser Asn Phe Leu Val Gly Leu Leu Phe Pro Ser Ala Ala		
435	440	445
Tyr Tyr Leu Gly Ala Tyr Val Phe Ile Ile Phe Thr Gly Phe Leu Ile		
450	455	460
Thr Phe Leu Ala Phe Thr Phe Phe Lys Val Pro Glu Thr Arg Gly Arg		
465	470	475
Thr Phe Glu Asp Ile Thr Arg Ala Phe Glu Gly Gln Ala His Gly Ala		
485	490	495
Asp Arg Ser Gly Lys Asp Gly Val Met Gly Met Asn Ser Ile Glu Pro		
500	505	510
Ala Lys Glu Thr Thr Thr Asn Val		
515	520	

<210> 3900

<211> 213

<212> PRT

<213> Homo sapiens

<400> 3900

Met Gly Arg Cys Ser Trp His Pro Glu Cys Val Ser Gly Gln Ala Leu
 1 5 10 15
 Val Lys Glu Ala Leu Ala Gly Thr Arg Asp Met Thr Ser Thr Leu Arg
 20 25 30
 Phe His Pro Gln Ser Thr Gln Met Arg Arg Val Ser Pro Gly Ala Pro
 35 40 45
 Pro Cys Pro Thr Pro Thr Leu Gly Gly Ile Leu Ser Arg Glu Met Gly
 50 55 60
 Pro Pro Ser Pro Arg Arg Pro Arg Ala Val Ala Val Arg Val Arg Lys
 65 70 75 80
 Ala Thr Thr Cys Ala Val Phe Val Val Thr Glu Thr Trp Glu Ser Leu
 85 90 95
 Thr Gly Ser Pro Thr Glu Ala Gly Ala Gly Leu Gly Ser Glu Ala Pro
 100 105 110
 Gly Glu Pro Arg Ala Ala Gly Phe Cys Thr His Leu Leu His Leu Pro
 115 120 125
 Thr His Thr Trp Lys Lys Ser Gln Ala His Leu Glu Ala Ala Gln Leu
 130 135 140
 Leu Ser Ser Cys Pro Pro Ile Pro Gly Phe Ser Ser Gln Leu His Pro
 145 150 155 160
 Gly Pro Gly Thr Pro Cys Asn Leu Gly Ser Pro Ala Pro Leu Arg Gly
 165 170 175
 Leu Pro Val Thr Trp Ser Gln Leu Pro Pro Arg Gly Ala Asp Leu Thr
 180 185 190
 Ser Thr Thr Cys Gln Trp His Val Pro Gly Glu Gln Glu Leu Gly Leu
 195 200 205
 Gln Gly Pro Cys Leu
 210

<210> 3901

<211> 122

<212> PRT

<213> Homo sapiens

<400> 3901

```

Met Ala Val Tyr Asn Met Val Pro Arg Arg Val Gly Ile Gln Arg Lys
 1             5             10             15
Trp Glu Leu Ser Ser Glu Cys Ala Pro Asn Leu Arg Ser Asp Thr Pro
      20             25             30
Ser Phe Leu Leu Tyr Phe Thr Gly Tyr Thr Asp Gln Cys Leu Tyr Asn
      35             40             45
Val Gly Gly Asn Ser Ile Thr Val Asn Ile Ile Arg Gln Gly Ser Leu
      50             55             60
Gly Thr Val Leu Glu Thr Asp Ser His Ser Pro Lys Pro Phe Arg Tyr
      65             70             75             80
Ala Leu Ile Tyr Glu Phe Thr Ile Ile Phe Lys Thr Asn Ser Trp Ala
      85             90             95
Arg Trp Pro Ala Pro Ile Val Pro Ala Ile Gln Glu Val Glu Glu Gly
      100            105            110
Gly Phe Phe Glu Pro Arg Gly Leu Gly Leu
      115            120

```

<210> 3902

<211> 449

<212> PRT

<213> Homo sapiens

<400> 3902

```

Met Ile Val Thr Gln Pro Lys Gly Ile Gly Ser Thr Val Gln Pro Ala
 1             5             10             15
Ala Lys Ile Ile Pro Thr Lys Ile Val Tyr Gly Gln Gln Gly Lys Thr
      20             25             30
Gln Val Leu Ile Lys Pro Lys Pro Val Thr Phe Gln Ala Thr Val Val
      35             40             45
Ser Glu Gln Thr Arg Gln Leu Val Thr Glu Thr Leu Gln Gln Ala Ser
      50             55             60
Arg Val Ala Glu Ala Gly Asn Ser Ser Ile Gln Glu Gly Lys Glu Glu

```

65		70		75		80									
Pro	Gln	Asn	Tyr	Thr	Asp	Ser	Ser	Ser	Ser	Ser	Thr	Glu	Ser	Ser	Gln
				85					90					95	
Ser	Ser	Gln	Asp	Ser	Gln	Pro	Val	Val	His	Val	Ile	Ala	Ser	Arg	Arg
			100					105					110		
Gln	Asp	Trp	Ser	Glu	His	Glu	Ile	Ala	Met	Glu	Thr	Ser	Pro	Thr	Ile
		115					120					125			
Ile	Tyr	Gln	Asp	Val	Ser	Ser	Glu	Ser	Gln	Ser	Ala	Thr	Ser	Thr	Ile
	130						135					140			
Lys	Ala	Leu	Leu	Glu	Leu	Gln	Gln	Thr	Thr	Val	Lys	Glu	Lys	Leu	Glu
145					150					155				160	
Ser	Lys	Pro	Arg	Gln	Pro	Thr	Ile	Asp	Leu	Ser	Gln	Met	Ala	Val	Pro
			165					170					175		
Ile	Gln	Met	Thr	Gln	Glu	Lys	Arg	His	Ser	Pro	Glu	Ser	Pro	Ser	Ile
		180						185					190		
Ala	Val	Val	Glu	Ser	Glu	Leu	Val	Ala	Glu	Tyr	Ile	Thr	Thr	Val	Ser
		195					200					205			
His	Arg	Ser	Gln	Pro	Gln	Gln	Pro	Ser	Gln	Pro	Gln	Arg	Thr	Leu	Leu
	210					215					220				
Gln	His	Val	Ala	Gln	Ser	Gln	Thr	Ala	Thr	Gln	Thr	Ser	Val	Val	Val
225				230						235				240	
Lys	Ser	Ile	Pro	Ala	Ser	Ser	Pro	Gly	Ala	Ile	Thr	His	Ile	Met	Gln
			245						250				255		
Gln	Ala	Leu	Ser	Ser	His	Thr	Ala	Phe	Thr	Lys	His	Ser	Glu	Glu	Leu
		260						265					270		
Gly	Thr	Glu	Glu	Gly	Glu	Val	Glu	Glu	Met	Asp	Thr	Leu	Asp	Pro	Gln
	275					280					285				
Thr	Gly	Leu	Phe	Tyr	Arg	Ser	Ala	Leu	Thr	Gln	Ser	Gln	Ser	Ala	Lys
	290					295					300				
Gln	Gln	Lys	Leu	Ser	Gln	Pro	Pro	Leu	Glu	Gln	Thr	Gln	Leu	Gln	Val
305				310						315				320	
Lys	Thr	Leu	Gln	Cys	Phe	Gln	Thr	Lys	Gln	Lys	Gln	Thr	Ile	His	Leu
			325						330				335		
Gln	Ala	Asp	Gln	Leu	Gln	His	Lys	Leu	Pro	Gln	Met	Pro	Gln	Leu	Ser
	340							345					350		
Ile	Arg	His	Gln	Lys	Leu	Thr	Pro	Leu	Gln	Gln	Glu	Gln	Ala	Gln	Pro

355 360 365
 Lys Pro Asp Val Gln His Thr Gln His Pro Met Val Ala Glu Asp Arg
 370 375 380
 Gln Leu Pro Thr Leu Met Ala Gln Pro Pro Gln Thr Val Val Gln Val
 385 390 395 400
 Leu Ala Val Lys Thr Thr Gln Gln Leu Pro Lys Leu Gln Gln Ala Pro
 405 410 415
 Asn Gln Pro Lys Ile Tyr Val Gln Pro Gln Thr Pro Gln Ser Gln Met
 420 425 430
 Ser Leu Pro Ala Ser Ser Glu Lys Gln Thr Ala Ser Gln Val Thr Glu
 435 440 445
 Tyr

<210> 3903

<211> 968

<212> PRT

<213> Homo sapiens

<400> 3903

Met Arg Cys Pro Gly Pro Arg Leu Leu Glu Thr Ser Trp Arg His Pro
 1 5 10 15
 Pro Ala Pro Phe Thr Ser Thr Asn Arg His Leu Tyr Asp Phe Thr Gly
 20 25 30
 Asn Leu Asn Leu Asp Gly Lys Ser Leu Val Ala Leu Gly Pro Asp Gln
 35 40 45
 Ile Leu Leu Arg Gly Thr Gln Leu Arg Asn Thr Gln Trp Val Phe Gly
 50 55 60
 Ile Val Val Tyr Thr Gly His Asp Thr Lys Leu Met Gln Asn Ser Thr
 65 70 75 80
 Lys Ala Pro Leu Lys Arg Ser Asn Val Glu Lys Val Thr Asn Val Gln
 85 90 95
 Ile Leu Val Leu Phe Gly Ile Leu Leu Val Met Ala Leu Val Ser Ser
 100 105 110
 Ala Gly Ala Leu Tyr Trp Asn Arg Ser His Gly Glu Lys Asn Trp Tyr

115	120	125
Ile Lys Lys Met Asp Thr Thr Ser Asp Asn Phe Gly Tyr Asn Leu Leu		
130	135	140
Thr Phe Ile Ile Leu Tyr Asn Asn Leu Ile Pro Ile Ser Leu Leu Val		
145	150	155
Thr Leu Glu Val Val Lys Tyr Thr Gln Ala Leu Phe Ile Asn Trp Asp		
165	170	175
Thr Asp Met Tyr Tyr Ile Gly Asn Asp Thr Pro Ala Met Ala Arg Thr		
180	185	190
Ser Asn Leu Asn Glu Glu Leu Gly Gln Val Lys Tyr Leu Phe Ser Asp		
195	200	205
Lys Thr Gly Thr Leu Thr Cys Asn Ile Met Asn Phe Lys Lys Cys Ser		
210	215	220
Ile Ala Gly Val Thr Tyr Gly His Phe Pro Glu Leu Ala Arg Glu Pro		
225	230	235
Ser Ser Asp Asp Phe Cys Arg Met Pro Pro Pro Cys Ser Asp Ser Cys		
245	250	255
Asp Phe Asp Asp Pro Arg Leu Leu Lys Asn Ile Glu Asp Arg His Pro		
260	265	270
Thr Ala Pro Cys Ile Gln Glu Phe Leu Thr Leu Leu Ala Val Cys His		
275	280	285
Thr Val Val Pro Glu Lys Asp Gly Asp Asn Ile Ile Tyr Gln Ala Ser		
290	295	300
Ser Pro Asp Glu Ala Ala Leu Val Lys Gly Ala Lys Lys Leu Gly Phe		
305	310	315
Val Phe Thr Ala Arg Thr Pro Phe Ser Val Ile Ile Glu Ala Met Gly		
325	330	335
Gln Glu Gln Thr Phe Gly Ile Leu Asn Val Leu Glu Phe Ser Ser Asp		
340	345	350
Arg Lys Arg Met Ser Val Ile Val Arg Thr Pro Ser Gly Arg Leu Arg		
355	360	365
Leu Tyr Cys Lys Gly Ala Asp Asn Val Ile Phe Glu Arg Leu Ser Lys		
370	375	380
Asp Ser Lys Tyr Met Glu Glu Thr Leu Cys His Leu Glu Tyr Phe Ala		
385	390	395
Thr Glu Gly Phe Arg Thr Leu Cys Val Ala Tyr Ala Asp Leu Ser Glu		

Glu Arg Trp Cys Ile Gly Leu Tyr Asn Val Ile Phe Thr Ala Leu Pro
 690 695 700
 Pro Phe Thr Leu Gly Ile Phe Glu Arg Ser Cys Thr Gln Glu Ser Met
 705 710 715 720
 Leu Arg Phe Pro Gln Leu Tyr Lys Ile Thr Gln Asn Gly Glu Gly Phe
 725 730 735
 Asn Thr Lys Val Phe Trp Gly His Cys Ile Asn Ala Leu Val His Ser
 740 745 750
 Leu Ile Leu Phe Trp Phe Pro Met Lys Ala Leu Glu His Asp Thr Val
 755 760 765
 Leu Thr Ser Gly His Ala Thr Asp Tyr Leu Phe Val Gly Asn Ile Val
 770 775 780
 Tyr Thr Tyr Val Val Val Thr Val Cys Leu Lys Ala Gly Leu Glu Thr
 785 790 795 800
 Thr Ala Trp Thr Lys Phe Ser His Leu Ala Val Trp Gly Ser Met Leu
 805 810 815
 Thr Trp Leu Val Phe Phe Gly Ile Tyr Ser Thr Ile Trp Pro Thr Ile
 820 825 830
 Pro Ile Ala Pro Asp Met Arg Gly Gln Ala Thr Met Val Leu Ser Ser
 835 840 845
 Ala His Phe Trp Leu Gly Leu Phe Leu Val Pro Thr Ala Cys Leu Ile
 850 855 860
 Glu Asp Val Ala Trp Arg Ala Ala Lys His Thr Cys Lys Lys Thr Leu
 865 870 875 880
 Leu Glu Glu Val Gln Glu Leu Glu Thr Lys Ser Arg Val Leu Gly Lys
 885 890 895
 Ala Val Leu Arg Asp Ser Asn Gly Lys Arg Leu Asn Glu Arg Asp Arg
 900 905 910
 Leu Ile Lys Arg Leu Gly Arg Lys Thr Pro Pro Thr Leu Phe Arg Gly
 915 920 925
 Ser Ser Leu Gln Gln Gly Val Pro His Gly Tyr Ala Phe Ser Gln Glu
 930 935 940
 Glu His Gly Ala Val Ser Gln Glu Glu Val Ile Arg Ala Tyr Asp Thr
 945 950 955 960
 Thr Lys Lys Lys Ser Arg Lys Lys
 965

<210> 3904

<211> 143

<212> PRT

<213> Homo sapiens

<400> 3904

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Met Ile Pro Cys Gly Met Arg Phe Ile Gly Leu Ala Thr Val Leu Leu
  1             5             10             15
Lys Pro Leu Leu Lys Gln Pro Ser Glu Val Leu Phe Val Lys Asp Leu
          20             25             30
Thr Leu Leu Asn His Ser Met Lys Pro Thr Asp Cys Thr Val Thr Leu
          35             40             45
Gln Val Ala His Met Ser Asn Gln Asp Ile Glu Lys Thr Gly Ala Glu
          50             55             60
Asp His Leu Gly Ile Thr Ala Arg Glu Ala Ala Ser Gln Lys Leu Met
          65             70             75             80
Val Pro Gly Ser Thr Ala His Arg Ala Leu Ser Ser Lys Pro Gln His
          85             90             95
Phe Gln Val Arg Val Lys Val Phe Glu Ala Arg Gln Leu Met Gly Asn
          100            105            110
Asn Ile Lys Pro Val Val Lys Val Ser Ile Ala Gly Gln Gln His Gln
          115            120            125
Thr Arg Ile Lys Met Gly Asn Asn Pro Phe Phe Asn Glu Val Gly
          130            135            140

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<210> 3905

<211> 195

<212> PRT

<213> Homo sapiens

<400> 3905

```

Met Arg Val Gly Thr Trp Ile Cys Leu Pro Gly Arg Pro Gly Arg Cys
  1             5             10             15

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Arg Lys Gln His Asp Leu Gly Asn Cys Pro Glu Val Pro Gly Ile Phe
 20 25 30
 Lys Thr Leu Ala Leu Ser Pro Gly Ala Pro Asp Met Met Gln Gln Pro
 35 40 45
 Arg Val Glu Thr Asp Thr Ile Gly Ala Gly Glu Gly Pro Gln Gln Ala
 50 55 60
 Val Pro Trp Ser Ala Trp Val Thr Arg His Gly Trp Val Arg Trp Trp
 65 70 75 80
 Val Ser His Met Pro Pro Ser Trp Ile Gln Trp Trp Ser Thr Ser Asn
 85 90 95
 Trp Arg Gln Pro Leu Gln Arg Leu Leu Trp Gly Leu Glu Gly Ile Leu
 100 105 110
 Tyr Leu Leu Leu Ala Leu Met Leu Cys His Ala Leu Phe Thr Thr Gly
 115 120 125
 Ser His Leu Leu Ser Ser Leu Trp Pro Val Val Ala Ala Val Trp Arg
 130 135 140
 His Leu Leu Pro Ala Leu Leu Leu Leu Val Leu Ser Ala Leu Pro Ala
 145 150 155 160
 Leu Leu Phe Thr Ala Ser Phe Leu Leu Leu Phe Ser Thr Leu Leu Ser
 165 170 175
 Leu Val Gly Leu Leu Thr Ser Met Thr His Pro Gly Asp Thr Gln Asp
 180 185 190
 Leu Asp Gln
 195

<210> 3906

<211> 1116

<212> PRT

<213> Homo sapiens

<400> 3906

Met Glu Ser Pro Leu Ile Tyr Val Ser Val Leu Leu Leu Asn Ile Phe
 1 5 10 15
 Glu Phe Ser Ser Gly Ile Val Tyr Asn Lys Asp Asp Thr Glu Lys Arg
 20 25 30

Phe Ala Cys Ser Asn Lys Gly Phe Pro Gln Glu Asn Glu Ile Ile Lys
 35 40 45
 Leu Tyr Leu Phe Leu Glu Asn Leu Lys Ile Gln Cys Phe Phe Gln Thr
 50 55 60
 Glu Asn Glu Ile Ala Ser Lys Ala Met Leu Ser Val Phe Thr Ser Gly
 65 70 75 80
 Gly Leu Ala Pro Ser Leu Gly Ile Met Asn Ser Thr Tyr Asn Gly Ile
 85 90 95
 Phe His Phe Asn Leu Thr Leu Phe Ser Asp Arg Ile Leu Trp Leu Val
 100 105 110
 Asp Ile Pro Arg Glu Asn Ile Thr Gln Ser Thr Asp Ile Ala Ala Val
 115 120 125
 Glu Glu Trp Leu Val Arg Ile Thr Leu His His Gly Leu Asn Ile Tyr
 130 135 140
 Ala Thr Glu Gly Thr Leu Leu Asp Val Ile Arg Glu Pro Ile Leu Gln
 145 150 155 160
 Trp Thr Pro Gly Asp Val Ile Pro Glu Ser Glu Ile Ser Lys Leu Tyr
 165 170 175
 Pro His Val Val Asp Leu Lys Val Thr Lys Cys Pro Cys Ala Asn Asp
 180 185 190
 Val Ala Leu Leu Gly Phe Ile Val Asp Thr Ile Val Asp Gly Val Tyr
 195 200 205
 Ile Gly Ile Thr Phe Gly Gly Phe Trp His Asp Tyr Asp Thr Thr Trp
 210 215 220
 Phe Asn Met Thr Gln Thr Ile Tyr Ser Gln Leu Gln Glu Glu Tyr Glu
 225 230 235 240
 Asp Leu Ser Leu Val Asp Met Val Leu Thr Asn His Phe Leu Val Ile
 245 250 255
 Leu Thr Ser Leu Gly Leu Phe Val Ser Glu Asp Leu Arg Tyr Pro Ser
 260 265 270
 Arg His Ser Leu Ser Phe Ser Arg Ala Asp Phe Cys Gly Phe Glu Arg
 275 280 285
 Val Asp Tyr Val Lys Gly Lys Leu Trp Tyr Asn Glu Arg Cys Phe Ala
 290 295 300
 Asn Arg Glu His Phe Glu Val Asp Tyr Val Thr Val Thr Phe Glu Arg
 305 310 315 320

Asn Arg Thr Leu Ser Glu Ser Ser Ser Cys Phe Tyr Ser Gln Glu Pro
 325 330 335
 Phe Leu Glu Trp Val Pro Cys Leu Pro His Ile Phe Lys Gly Ile Lys
 340 345 350
 Ile Phe Pro Thr Val Leu Thr Phe Leu Val Asp Gln Glu Arg Gly Thr
 355 360 365
 Gly Val Tyr Leu Phe Tyr Asn Lys Val Arg Lys Thr Ala Ile Ala Ser
 370 375 380
 Val Ser Thr Leu Arg Asn Asn Glu Pro Asn Ser Gln Ser Lys Phe Pro
 385 390 395 400
 Ile Phe Arg Phe Pro Ser Ser Phe Ser Ser Pro Val Gly Met Val Phe
 405 410 415
 His Pro Arg Ser His Phe Leu Tyr Ala Tyr Gly Asn Gln Ile Trp Leu
 420 425 430
 Ser Val Asp Gly Gly Asn Thr Phe Gln Leu Ile Ala Asn Phe His Asp
 435 440 445
 Asp Ile Ile Lys Lys Thr Phe His Ser Phe Tyr Thr Ser Ala Ile Thr
 450 455 460
 Phe Val Ser Gln Arg Gly Lys Val Tyr Ser Thr Lys Ala Gly Met Gly
 465 470 475 480
 Arg Tyr Ser Ala Val Gly Ser Val Thr Glu Arg Ile Phe Thr Leu Tyr
 485 490 495
 Tyr Asp His Leu Gly Phe Leu His Lys Leu Thr Leu Gly Arg Phe Glu
 500 505 510
 Ala Ser Gly Pro Pro Thr Ala Phe Gly Asn Ser Arg Asn Leu Phe Gly
 515 520 525
 Gln Pro Pro Asp Met Gly Phe Glu Thr Ala Leu Ala Pro Gln His Thr
 530 535 540
 Ser Leu Asp Glu Ile Ile Phe Phe Ala Tyr Val Pro Glu Asn Glu Pro
 545 550 555 560
 Gln Glu Thr Ile Tyr Ser Lys Lys Phe Gly Asn Ile His Tyr Gly Lys
 565 570 575
 Val Ile His Ser Gly Lys Thr Gly Arg Ala Tyr Ile Arg Lys Val Leu
 580 585 590
 Gln His Thr Thr Pro Lys Gly Phe Leu Ser Ser Val Ile Ala Glu Met
 595 600 605

Lys Glu Pro Phe Gly Leu Glu Glu Val Asn Glu Ser Ser Cys Leu Ser
 610 615 620
 Ser Ser Leu Leu Ile Asn Lys Ala Gly Asn Val Tyr Lys Leu Thr Leu
 625 630 635 640
 Asp Ser Gln Val Val Gln Ala Leu Phe Glu Asp Thr Asp Ile Glu Lys
 645 650 655
 Thr Val Val Leu Pro Gly Tyr Ser Ser Phe Leu Ile Thr Ser Ile Leu
 660 665 670
 Asp Asn Lys Asn Ala Leu Ala Ile Ala Thr Met Pro Glu Ser Ala Pro
 675 680 685
 Asn Asn Met Thr Phe Leu Lys Ser Thr Trp Phe Leu Tyr Asn Phe Gly
 690 695 700
 Gln Arg Asn Gly Arg Thr Trp Lys Ile Tyr Ser Lys Pro Cys Asn Tyr
 705 710 715 720
 Trp Phe Gln His Asp Asp Ser Pro Ser Leu Asn Ile Val Lys Tyr Ile
 725 730 735
 Asp Leu Gly Asn Ser Tyr Val Leu Lys Ala Lys Val Ile Arg Asn Ala
 740 745 750
 Lys Gly Phe Arg Met Leu Glu Ile Pro Leu Leu Thr Val Phe Val Gly
 755 760 765
 Asn Pro Asn Leu Leu Glu Val Thr Ala Glu Val Thr Phe Asp Asp Thr
 770 775 780
 Asp Ser Tyr Val Ile Thr Ile Ser Ala Ala Ser Lys Val Leu His Gln
 785 790 795 800
 Gly Ser Thr Ser Leu Ala Phe Ile Met Trp Ser Ala Ser Thr Glu Cys
 805 810 815
 Phe Val Thr Thr Met Val Pro Thr Leu Lys Ser Ser Cys Ser Tyr Leu
 820 825 830
 Arg Ser Met His His Ile Pro Ser Lys Phe Ile Pro Phe Glu Asp Trp
 835 840 845
 Ile Ser Gly Val His Lys Asp Ser Gln Gly Phe Asn Leu Ile Lys Thr
 850 855 860
 Leu Pro Ile Asn Tyr Arg Pro Pro Ser Asn Met Gly Ile Ala Ile Pro
 865 870 875 880
 Leu Thr Asp Asn Phe Tyr His Ala Asp Pro Ser Lys Pro Ile Pro Arg
 885 890 895

Asn Met Phe His Met Ser Lys Lys Thr Gly Lys Phe Lys Gln Cys Ala
 900 905 910
 Asn Val Ser Thr Arg Glu Glu Cys Asn Cys Thr Lys Asp Gln Lys Phe
 915 920 925
 Ser His Ala Val Ala Phe Ser Asp Cys Arg Glu Lys Val Pro Arg Phe
 930 935 940
 Lys Phe Pro Ile Thr Gln Tyr Pro Val Ser Leu Glu Ile Ile Asn Glu
 945 950 955 960
 Asp Gly Arg Val Pro Leu Gln Ser Pro Tyr Leu Val Thr Val Thr Glu
 965 970 975
 Val Asn Met Arg His Asn Trp Lys Leu Lys His Thr Val Pro Glu Asn
 980 985 990
 Ile Lys Arg Met Lys Gln Leu Val Glu Pro Ile Leu Gly Ala Ala Val
 995 1000 1005
 Tyr Asn Pro Ser Gly Leu Asn Leu Ser Ile Lys Gly Ser Glu Leu Phe
 1010 1015 1020
 His Phe Arg Val Thr Val Ile Ser Gly Val Thr Phe Cys Asn Leu Ile
 1025 1030 1035 1040
 Glu Glu Phe Gln Ile Tyr Val Asp Gly Ala Pro Leu Pro Phe Pro Gly
 1045 1050 1055
 His Thr Leu Ile Ala Val Ala Thr Ala Val Val Leu Gly Gly Leu Ile
 1060 1065 1070
 Phe Ile Ala Phe Met Phe Gln Leu Gln Gly Ile His Pro Trp Arg Thr
 1075 1080 1085
 Phe Gln Arg Trp Ile Arg Arg Asn Gln Glu Lys Phe Ser Ser Ile Ser
 1090 1095 1100
 Leu Ser Glu Leu Ile His Arg Ser Lys Ser Glu Glu
 1105 1110 1115

<210> 3907

<211> 324

<212> PRT

<213> Homo sapiens

<400> 3907

Met	Arg	His	Arg	Glu	Gly	Ser	Trp	Glu	Pro	Trp	Ser	Arg	Pro	Val	Gly
1				5				10					15		
Glu	Pro	Pro	Glu	Ala	Gly	Trp	Asp	Tyr	Thr	Gln	Trp	Lys	Gln	Glu	Arg
			20					25					30		
Glu	Gln	Ile	Asp	Leu	Ala	Arg	Leu	Ala	Arg	His	Arg	Asp	Ala	Gln	Gly
		35					40					45			
Asp	Trp	Arg	Arg	Pro	Trp	Asp	Leu	Asp	Lys	Ala	Lys	Ser	Thr	Leu	Gln
	50					55				60					
Asp	Cys	Ser	Gln	Leu	Arg	Gly	Glu	Gly	Pro	Ala	Arg	Ala	Gly	Ser	Arg
65				70					75					80	
Arg	Gly	Pro	Arg	Ser	His	Gln	Lys	Leu	Gln	Pro	Pro	Pro	Leu	Leu	Pro
				85					90					95	
Asp	Gly	Lys	Gly	Arg	Gly	Gly	Gln	Ala	Asn	Arg	Pro	Ser	Val	Ala	Pro
		100						105					110		
Ala	Thr	Gly	Ser	Lys	Ala	Arg	Gly	Lys	Glu	Arg	Leu	Thr	Gly	Arg	Ala
		115					120						125		
Arg	Arg	Trp	Asp	Met	Lys	Glu	Asp	Lys	Glu	Glu	Leu	Glu	Gly	Gln	Glu
	130					135					140				
Gly	Ser	Gln	Ser	Thr	Arg	Glu	Thr	Pro	Ser	Glu	Glu	Glu	Gln	Ala	Gln
145				150					155					160	
Lys	Gln	Ser	Gly	Met	Glu	Gln	Gly	Arg	Leu	Gly	Ser	Ala	Pro	Ala	Ala
			165					170					175		
Ser	Pro	Ala	Leu	Ala	Ser	Pro	Glu	Gly	Pro	Lys	Gly	Glu	Ser	Val	Ala
		180						185					190		
Ser	Thr	Ala	Ser	Ser	Val	Pro	Cys	Ser	Pro	Gln	Glu	Pro	Asp	Leu	Ala
		195				200					205				
Pro	Leu	Asp	Leu	Ser	Leu	Gly	Gly	Ala	Gly	Ile	Pro	Gly	Pro	Arg	Glu
	210					215					220				
Ser	Gly	Cys	Val	Leu	Gly	Leu	Arg	Pro	Gly	Ala	Gln	Glu	Ser	Pro	Val
225				230					235					240	
Ser	Trp	Pro	Glu	Gly	Ser	Lys	Gln	Gln	Pro	Leu	Gly	Trp	Ser	Asn	His
			245					250					255		
Gln	Ala	Glu	Leu	Glu	Val	Gln	Thr	Cys	Pro	Glu	Pro	Gln	Arg	Gly	Ala
		260						265					270		
Gly	Leu	Pro	Glu	Pro	Gly	Glu	Asp	Arg	Ser	Gly	Lys	Ser	Gly	Ala	Gln
		275						280					285		

Gln Gly Leu Ala Pro Arg Ser Arg Pro Thr Arg Gly Gly Ser Gln Arg
 290 295 300
 Ser Arg Gly Thr Ala Gly Val Arg Arg Arg Thr Gly Arg Pro Gly Pro
 305 310 315 320
 Ala Gly Arg Cys

<210> 3908

<211> 1012

<212> PRT

<213> Homo sapiens

<400> 3908

Met Met Arg Lys Pro Ser Ser Asp Lys Ile Pro Ser Ile Asp Lys Thr
 1 5 10 15
 Leu Val Asn Lys Val Val His Ser Ser Val Cys Asn Ile Leu Asn Asp
 20 25 30
 Tyr Gly Ser Gln Asp Ser Ile Trp Lys Asn Ile Asn Ser Asn Gly Glu
 35 40 45
 Asn Leu Ala Arg Arg Leu Thr Ser Ala Val Ile Asn Glu Ile Phe Gln
 50 55 60
 His Gln Val Asn Leu Ile Phe Cys Asp Glu Val Ser Val Ser Ala Cys
 65 70 75 80
 Leu Pro Leu Glu Ser Lys Asp Val Val Lys Lys Val Gln Lys Leu Ala
 85 90 95
 Gln Thr Ala Ser Lys Glu Cys Gln Thr Ser Ser Pro Tyr Thr Ile Ile
 100 105 110
 Leu Pro His Lys Phe Leu Glu Asn Val Ile Ser Ala Leu Phe Ser Lys
 115 120 125
 Ile Phe Ser Thr Ile Ser Ser Thr Lys Thr Lys Glu Pro Glu Asp Asn
 130 135 140
 Leu Ser Thr Glu Leu Asn Phe Leu Gln Met Lys Leu Val Ser Ala Val
 145 150 155 160
 Ala Thr Glu Ile Ser Gln Asp Lys Tyr Met Thr Ile Gln Tyr Val Glu
 165 170 175

Thr Leu Gln Ser Asp Asp Asp Glu Ile Ile Gln Leu Val Val Gln Ser
 180 185 190
 Val Tyr Asn Asn Leu Leu Pro Gln Phe Gly Ser Gln Glu Ile Ile Gln
 195 200 205
 Asn Cys Val Thr Ser Gly Cys Lys Ile Leu Ser Glu Asn Ile Val Asp
 210 215 220
 Leu Val Leu Arg Glu Val Ala Ser Asn Gln Leu Gln Ser Tyr Phe Cys
 225 230 235 240
 Gly Glu Leu Thr Pro His Gln Cys Val Glu Val Glu Asn Ile Val Glu
 245 250 255
 Lys Ile Leu Lys Asp Val Phe Gln Thr Thr Asp Val Pro Gln Pro Lys
 260 265 270
 Pro Ser His Ala Asp Lys Leu Ser Tyr Asn Ile Ile Glu Glu Ile Ala
 275 280 285
 Val Lys Phe Leu Ser Lys Leu Leu Ser Ile Phe Pro Lys Val His Lys
 290 295 300
 Glu Arg Thr Lys Ser Leu Glu Thr Asp Met Gln Lys Ile Thr Ser Lys
 305 310 315 320
 Val Leu Asn Ser Val Gln Glu Phe Ile Ser Lys Ser Lys Ile Lys Leu
 325 330 335
 Val Pro Pro Thr Lys Glu Ser Pro Thr Val Pro Val Ala Asp Asn Ala
 340 345 350
 Thr Ile Glu Asn Ile Val Asn Ser Ile Tyr Thr Ser Val Leu Lys His
 355 360 365
 Ser Gly Ser Tyr Thr Ser Val Phe Lys Asp Leu Met Gly Lys Ser Asn
 370 375 380
 Val Leu Ser Asp Thr Ile Gly Phe Leu Met Val Asn Ala Ile Ser Asn
 385 390 395 400
 Ser Glu Phe Gln Pro Gln Val Glu Glu Glu Val Ser Asn Ser Glu Leu
 405 410 415
 Val Leu Glu Ala Val Lys Ile Met Glu Lys Val Ile Lys Ile Ile Asp
 420 425 430
 Glu Leu Lys Ser Lys Glu Lys Ser Ser Ser Arg Lys Gly Leu Thr Leu
 435 440 445
 Asp Ala Lys Leu Leu Glu Glu Val Leu Ala Leu Phe Leu Ala Lys Leu

450	455	460	
Ile Arg Leu Pro Ser Ser Ser Ser Lys Asp Glu Lys Asn Leu Ser Lys			
465	470	475	480
Thr Glu Leu Asn Lys Ile Ala Ser Gln Leu Ser Lys Leu Val Thr Ala			
	485	490	495
Glu Ile Ser Arg Ser Ser Ile Ser Leu Ile Ala Ser Asp Pro Glu Glu			
	500	505	510
His Cys Leu Asn Pro Glu Asn Thr Glu Arg Ile Tyr Gln Val Val Asp			
	515	520	525
Ser Val Tyr Ser Asn Ile Leu Gln Gln Ser Gly Thr Asn Lys Glu Phe			
530	535	540	
Tyr Tyr Asp Ile Lys Asp Thr Asn Thr Ala Phe Pro Lys Lys Val Ala			
545	550	555	560
Ser Leu Ile Ile Asp Gly Val Ser Ser Phe Pro Leu Asp Thr Ile Asn			
	565	570	575
Ser Thr Ile Ser Asn Ala Asp Leu Ser Gly Glu Leu Asp Val Asn Arg			
	580	585	590
Ile Val Gln Lys Ala Gln Glu His Ala Phe Asn Val Ile Pro Glu Leu			
	595	600	605
Glu Gln Glu Lys Leu Asp Gln Asn Leu Ser Glu Glu Glu Ser Pro Ile			
610	615	620	
Lys Ile Val Pro His Val Gly Lys Lys Pro Val Lys Ile Asp Pro Lys			
625	630	635	640
Ile Ile Ser Glu His Leu Ala Val Ile Ser Ile Lys Thr Gln Pro Leu			
	645	650	655
Glu Lys Leu Lys Gln Glu Cys Leu Lys Arg Thr Gly His Ser Ile Ala			
	660	665	670
Glu Leu Arg Arg Ala Ser Ile Ser Gly Arg Asn Tyr Ser Leu Gly Ser			
	675	680	685
Pro Asp Leu Glu Lys Arg Lys Thr Glu Arg Arg Thr Ser Leu Asp Lys			
690	695	700	
Thr Gly Arg Leu Asp Val Lys Pro Leu Glu Ala Val Ala Arg Asn Ser			
705	710	715	720
Phe Gln Asn Ile Arg Lys Pro Asp Ile Thr Lys Val Glu Leu Leu Lys			
	725	730	735
Asp Val Gln Ser Lys Asn Asp Leu Ile Val Arg Leu Glu Ala His Asp			

740	745	750
Ile Asp Gln Val Tyr Leu Glu Asn Tyr Ile Lys Glu Glu Arg Asp Ser		
755	760	765
Asp Glu Asp Glu Val Val Leu Thr Gln Thr Phe Ala Lys Glu Glu Gly		
770	775	780
Ile Lys Val Phe Glu Asp Gln Val Lys Glu Val Lys Lys Pro Ile Gln		
785	790	795
Ser Lys Leu Ser Pro Lys Ser Thr Leu Ser Thr Ser Ser Leu Lys Lys		
805	810	815
Phe Leu Ser Leu Ser Lys Cys Cys Gln Thr Thr Ala Ser Ala Asn Ile		
820	825	830
Glu Ser Thr Glu Ala Ile Ser Asn Gln Val Ile Glu Ser Lys Glu Thr		
835	840	845
His Val Lys Arg Ala Val Ala Glu Leu Asp Met Ala Thr Pro Lys Thr		
850	855	860
Met Pro Glu Thr Ala Ser Ser Ser Trp Glu Glu Lys Pro Gln Cys Lys		
865	870	875
Lys Glu Glu Lys Asn Leu Val Thr Glu Pro Thr His Tyr Phe Ile His		
885	890	895
Arg Ile Met Ser Ser Ser Ser Tyr Asn Gln Glu Asp Leu Ile Ser Ser		
900	905	910
Thr Gly Glu Ala Glu Asp Cys His Ser Asp Pro Ser Ala Lys Ile Leu		
915	920	925
Glu Glu Ser Ser Gln Glu Gln Lys Pro Glu His Gly Asn Ser Val Lys		
930	935	940
Phe Ile Thr Ile Phe Glu Arg Ser Lys Asp Val Leu Gly Ser Ala Asn		
945	950	955
Pro Ser Lys Glu Val Ile Ser Glu Thr Pro Lys Pro Asp Val Ser Lys		
965	970	975
Gln Gly Ser Lys Met Leu Thr Lys Met Ser Ser Ala Leu Ser Lys Val		
980	985	990
Phe Ser Gln Cys Asn Thr Asn Ile Ser Arg Ser Ser Ser Pro Ala His		
995	1000	1005
Gln Asp Glu His		
1010		

<210> 3909

<211> 829

<212> PRT

<213> Homo sapiens

<400> 3909

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Met Thr Glu Asn Lys Thr Val Ser Ser Ser Ser Thr Arg Asp Asp Gln
 1             5             10             15
Thr Asn Ile Gly Leu Thr Cys Gln Glu Val Lys Ala Leu Arg Glu Lys
      20             25             30
Ala Trp Ser Arg Thr Asn Glu Gly Asn Ala Met Ser Gln Ser Leu Val
      35             40             45
Ile Tyr Gly Ala Ser Lys Glu Asn Ser Glu Gly Phe His Glu Ser Lys
      50             55             60
Met Thr Asn Thr Glu Gly Val Asn Lys Gly Ile Tyr Phe Ser Tyr Pro
 65             70             75             80
Cys Arg Arg His Ser Cys Ala Val Val Asn Ile Pro Ala Pro Cys Val
      85             90             95
Asn Lys Met Ile Ser His Ile Gln Asp Val Glu Ser Lys Ile Gln Glu
      100            105            110
His Leu Lys Arg Phe Glu Thr Ser Phe Glu Glu Trp Ser Arg Thr Ser
      115            120            125
Ser Thr Lys Asp Leu Lys Glu Asp Trp Ser Val Thr Thr Pro Val Lys
      130            135            140
Glu Val Lys Pro Gly Glu Lys Arg Asp Glu Lys Cys Pro Glu Leu Lys
      145            150            155            160
Gln Glu Met Glu Thr Leu Leu Ser Glu Ala Ile Arg Leu Ile Lys Ser
      165            170            175
Leu Glu Thr Asp Arg Ala Asp Ala Glu Glu Ala Leu Lys Gln Gln Arg
      180            185            190
Ser Arg Lys Asn Met Ile Asn Met Lys Ile Asp Ser Trp Ser Val Trp
      195            200            205
Lys Leu Gln Glu Leu Pro Leu Ala Val Gln Lys Glu His Glu Ala Tyr
      210            215            220
Leu Ser Asp Val Ile Glu Leu Gln Trp His Leu Glu Asp Lys Ala Asn

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225 230 235 240
 Gln Leu Gln His Phe Glu Lys Gln Lys Thr Glu Leu Glu Glu Ala Asn
 245 250 255
 Ala Lys Ile Gln Ala Asp Ile Asp Tyr Met Asn Glu His Gly Pro Leu
 260 265 270
 Leu Asp Ser Lys Gln Asn Gln Glu Leu Gln Asp Leu Lys Asn His Tyr
 275 280 285
 Lys Lys Lys Met Glu Val Met Asp Leu His Arg Lys Val Asn Glu Glu
 290 295 300
 Leu Glu Glu Ala Leu Glu Ala Cys Glu Asn Ala Arg Leu Lys Ala Gln
 305 310 315 320
 Gln Ile Lys Glu Glu Ile Asp Lys Asp Ile Tyr Gln Asp Glu Lys Thr
 325 330 335
 Ile Glu Ala Tyr Lys Arg Glu Ile Tyr Gln Leu Asn Ser Leu Phe Asp
 340 345 350
 His Tyr Ser Ser Ser Val Ile Asn Val Asn Thr Asn Ile Glu Glu Glu
 355 360 365
 Glu Glu Glu Val Thr Glu Ala Ile Arg Glu Thr Lys Ser Ser Lys Asn
 370 375 380
 Glu Leu His Ser Leu Ser Lys Met Leu Glu Asp Leu Arg Arg Val Tyr
 385 390 395 400
 Asp Gln Leu Thr Trp Lys Gln Lys Ser His Glu Asn Gln Tyr Leu Glu
 405 410 415
 Ala Val Asn Asp Phe Tyr Ala Ala Lys Lys Thr Trp Asp Ile Glu Leu
 420 425 430
 Ser Asp Val Ala Lys Asp Phe Ser Ala Ile Ser Leu Ala Cys Thr Lys
 435 440 445
 Leu Thr Glu Asp Asn Lys Lys Leu Glu Ile Asp Ile Asn Lys Ile Thr
 450 455 460
 Glu Lys Thr Asn Glu Ser Ile Arg Lys Lys Ser Lys Tyr Glu Ser Glu
 465 470 475 480
 Ile Lys Tyr Leu Thr Ile Met Lys Leu Lys Asn Asp Lys His Leu Lys
 485 490 495
 Asn Ile Tyr Lys Glu Ala Tyr Arg Ile Gly Thr Leu Phe His Leu Thr
 500 505 510
 Lys His Lys Thr Asp Glu Met Glu Asp Lys Ile Ala Glu Val Arg Arg

515	520	525
Lys Phe Lys Gly Arg Glu Glu Phe Leu Lys Lys Leu Thr Gln Gly Glu		
530	535	540
Val Ala Ala Gly Met Val Leu Gln Lys Lys Leu Tyr Ser Ile Tyr Glu		
545	550	555
Val Gln Ala Leu Glu Arg Lys Glu Leu Ile Lys Asn Arg Ala Ile Cys		
565	570	575
Ala Met Ser Leu Ala Glu Leu Gln Glu Pro Leu Leu Gln Leu Glu Asp		
580	585	590
Glu Ala Glu Arg Ile Arg Ser Leu Asn Lys Glu His Ser Val Ser Lys		
595	600	605
Arg Ser Ala Ile Phe Lys Asp Leu Glu Ala Thr Lys Ser Lys Thr Met		
610	615	620
Ile Phe Tyr Ala Lys Ile Asn Glu Leu Asn Glu Glu Leu Lys Ala Lys		
625	630	635
Glu Glu Glu Lys Lys Ser Phe Asp Gln Thr Leu Glu Ile Leu Lys Asn		
645	650	655
Lys Phe Ile Thr Met Arg Phe Lys Arg Glu His Ala Gln Thr Val Phe		
660	665	670
Asp His Tyr Met Gln Glu Lys Lys Asp Cys Glu Glu Arg Ile Phe Glu		
675	680	685
Glu Asp Gln Arg Phe Arg Val Leu Leu Ala Val Arg Gln Lys Thr Leu		
690	695	700
Gln Asp Thr Gln Lys Ile Ile Ala Asp Ser Leu Glu Glu Asn Leu Arg		
705	710	715
Leu Ala Gln Glu Tyr Gln Gln Leu Gln Phe Thr Phe Leu Lys Glu Lys		
725	730	735
Asp Asn Tyr Phe Asn Ile Tyr Asp Lys Gln Leu Ser Leu Asp Thr Ser		
740	745	750
Ile Arg Asp Lys Lys Gln Leu Cys Gln Leu Gln Arg Arg Met His Thr		
755	760	765
Leu Trp Gln Glu His Phe Lys Leu Val Val Leu Phe Ser Gln Met Arg		
770	775	780
Leu Ala Asn Phe Gln Thr Asp Ser Gln Glu Ser Ile Gln Lys Ile Leu		
785	790	795
Ala Val Gln Glu Glu Ser Ser Asn Leu Met Gln His Ile Leu Gly Phe		

805 810 815
 Phe Gln Thr Leu Thr Asp Gly Thr Cys Glu Asn Asp Gly
 820 825

<210> 3910

<211> 214

<212> PRT

<213> Homo sapiens

<400> 3910

Met Ala Ala Leu Cys Leu Arg Lys Gly Pro Leu Pro Leu Cys Pro Arg
 1 5 10 15
 Pro Ser His Gly Leu Lys Ala Met Gly Gly Glu Gly Ser Cys Gln Asp
 20 25 30
 Asp Thr Glu Ser Gly Ala Leu Thr Phe Leu Pro Ser Asp Asp Ala Gln
 35 40 45
 Pro Gly Lys Ala Leu Arg Pro Gln Arg Ser Gly Pro Gly Gly Ser Glu
 50 55 60
 Arg Arg Gly Arg Gly Trp Gly Arg Ala Gly Ala Leu Glu Glu Gln Val
 65 70 75 80
 Arg Gln Gly Pro Ser Ala Gln Gly His Pro Arg Thr Gln Ala Arg Ser
 85 90 95
 Arg Pro Cys Ser Ala Arg Pro His Cys Ser Cys Gly Lys Gly Lys His
 100 105 110
 Gly Ala Leu Pro Gln Gly Gln Cys Ser Ala Trp Leu Glu Leu Met Thr
 115 120 125
 Val Thr Val Pro Cys Cys His His Cys Ser His Cys Pro Gly Gly Gln
 130 135 140
 Pro Gly Pro Gln Leu His Arg Ala Trp Thr Val Trp Ser Trp Ala Val
 145 150 155 160
 Pro Ser Ser Ala Ser Arg Ala Cys Gly Asp Gly His Arg Arg Ser Thr
 165 170 175
 Cys Gln Ala Gln Gly Ser Cys Thr Gly Leu Pro Pro Leu Arg Gly Cys
 180 185 190
 Leu Pro Arg Leu Val Pro Gly Arg Pro Cys Pro His Leu Arg Gln Gln

195
Asp Lys Gly Lys Trp Asn
210

200

205

<210> 3911

<211> 950

<212> PRT

<213> Homo sapiens

<400> 3911

Met Glu Asp Lys Leu His Lys Arg Ser Pro Pro Pro Glu Thr Ile Lys
1 5 10 15
Ser Lys Leu Asn Thr Ser Val Asp Thr His Lys Ile Lys Ser Ser Pro
20 25 30
Ser Pro Glu Val Val Lys Pro Lys Ile Thr His Ser Pro Asp Ser Val
35 40 45
Lys Ser Lys Ala Thr Tyr Val Asn Ser Gln Ala Thr Gly Glu Arg Arg
50 55 60
Leu Ala Asn Lys Ile Glu His Glu Leu Ser Arg Cys Ser Phe His Pro
65 70 75 80
Ile Pro Thr Arg Ser Ser Thr Leu Glu Thr Thr Lys Ser Pro Leu Ile
85 90 95
Ile Asp Lys Asn Glu His Phe Thr Val Tyr Arg Asp Pro Ala Leu Ile
100 105 110
Gly Ser Glu Thr Gly Ala Asn His Ile Ser Pro Phe Leu Ser Gln His
115 120 125
Pro Phe Pro Leu His Ser Ser Ser His Arg Thr Cys Leu Asn Pro Gly
130 135 140
Thr His His Pro Ala Leu Thr Pro Ala Pro His Leu Leu Ala Gly Ser
145 150 155 160
Ser Ser Gln Thr Pro Leu Pro Thr Ile Asn Thr His Pro Leu Thr Ser
165 170 175
Gly Pro His His Ala Val His His Pro His Leu Leu Pro Thr Val Leu
180 185 190

Pro Gly Val Pro Thr Ala Ser Leu Leu Gly Gly His Pro Arg Leu Glu
 195 200 205
 Ser Ala His Ala Ser Ser Leu Ser His Leu Ala Leu Ala His Gln Gln
 210 215 220
 Gln Gln Gln Leu Leu Gln His Gln Ser Pro His Leu Leu Gly Gln Ala
 225 230 235 240
 His Pro Ser Ala Ser Tyr Asn Gln Leu Gly Leu Tyr Pro Ile Ile Trp
 245 250 255
 Gln Tyr Pro Asn Gly Thr His Ala Tyr Ser Gly Leu Gly Leu Pro Ser
 260 265 270
 Ser Lys Trp Val His Pro Glu Asn Ala Val Asn Ala Glu Ala Ser Leu
 275 280 285
 Arg Arg Asn Ser Pro Ser Pro Trp Leu His Gln Pro Thr Pro Val Thr
 290 295 300
 Ser Ala Asp Gly Ile Gly Leu Leu Ser His Ile Pro Val Arg Pro Ser
 305 310 315 320
 Ser Ala Glu Pro His Arg Pro Leu Lys Ile Thr Ala His Ser Ser Pro
 325 330 335
 Pro Leu Thr Lys Thr Leu Val Asp His His Lys Glu Glu Leu Glu Arg
 340 345 350
 Lys Ala Phe Met Glu Pro Leu Arg Ser Val Ala Ser Thr Ser Ala Lys
 355 360 365
 Asn Asp Leu Asp Leu Asn Arg Ser Gln Thr Gly Lys Asp Cys His Leu
 370 375 380
 His Arg His Phe Val Asp Pro Val Leu Asn Gln Leu Gln Arg Pro Pro
 385 390 395 400
 Gln Glu Thr Gly Glu Arg Leu Asn Lys Tyr Lys Glu Glu His Arg Arg
 405 410 415
 Ile Leu Gln Glu Ser Ile Asp Val Ala Pro Phe Thr Thr Lys Ile Lys
 420 425 430
 Gly Leu Glu Gly Glu Arg Glu Asn Tyr Ser Arg Val Ala Ser Ser Ser
 435 440 445
 Ser Ser Pro Lys Ser His Ile Ile Lys Gln Asp Met Asp Val Glu Arg
 450 455 460
 Ser Val Ser Asp Leu Tyr Lys Met Lys His Ser Val Pro Gln Ser Leu
 465 470 475 480

Pro Gln Ser Asn Tyr Phe Thr Thr Leu Ser Asn Ser Val Val Asn Glu
 485 490 495
 Pro Pro Arg Ser Tyr Pro Ser Lys Glu Val Ser Asn Ile Tyr Gly Asp
 500 505 510
 Lys Gln Ser Asn Ala Leu Ala Ala Ala Ala Ala Asn Pro Gln Thr Leu
 515 520 525
 Thr Ser Phe Ile Thr Ser Leu Ser Lys Pro Pro Pro Leu Ile Lys His
 530 535 540
 Gln Pro Glu Ser Glu Gly Leu Val Gly Lys Ile Pro Glu His Leu Pro
 545 550 555 560
 His Gln Ile Ala Ser His Ser Val Thr Thr Phe Arg Asn Asp Cys Arg
 565 570 575
 Ser Pro Thr His Leu Thr Val Ser Ser Thr Asn Thr Leu Arg Ser Met
 580 585 590
 Pro Ala Leu His Arg Ala Pro Val Phe His Pro Pro Ile His His Ser
 595 600 605
 Leu Glu Arg Lys Glu Gly Ser Tyr Ser Ser Leu Ser Pro Pro Thr Leu
 610 615 620
 Thr Pro Val Met Pro Val Asn Ala Gly Gly Lys Val Gln Glu Ser Gln
 625 630 635 640
 Lys Pro Pro Thr Leu Ile Pro Glu Pro Lys Asp Ser Gln Ala Asn Phe
 645 650 655
 Lys Ser Ser Ser Glu Gln Ser Leu Thr Glu Met Trp Arg Pro Asn Asn
 660 665 670
 Asn Leu Ser Lys Glu Lys Thr Glu Trp His Val Glu Lys Ser Ser Gly
 675 680 685
 Lys Leu Gln Ala Ala Met Ala Ser Val Ile Val Arg Pro Ser Ser Ser
 690 695 700
 Thr Lys Thr Asp Ser Met Pro Ala Met Gln Leu Ala Ser Lys Asp Arg
 705 710 715 720
 Val Ser Glu Arg Ser Ser Ala Gly Ala His Lys Thr Asp Cys Leu Lys
 725 730 735
 Leu Ala Glu Ala Gly Glu Thr Gly Arg Ile Ile Leu Pro Asn Val Asn
 740 745 750
 Ser Asp Ser Val His Thr Lys Ser Glu Lys Asn Phe Gln Ala Val Ser
 755 760 765

Gln Gly Ser Val Pro Ser Ser Val Met Ser Ala Val Asn Thr Met Cys
 770 775 780
 Asn Thr Lys Thr Asp Val Ile Thr Ser Ala Ala Asp Thr Thr Ser Val
 785 790 795 800
 Ser Ser Trp Gly Gly Ser Glu Val Ile Ser Ser Leu Ser Asn Thr Ile
 805 810 815
 Leu Ala Ser Thr Ser Ser Glu Cys Val Ser Ser Lys Ser Val Ser Gln
 820 825 830
 Pro Val Ala Gln Lys Gln Glu Cys Lys Val Ser Thr Thr Ala Pro Val
 835 840 845
 Thr Leu Ala Ser Ser Lys Thr Gly Ser Val Val Gln Pro Ser Ser Gly
 850 855 860
 Phe Ser Gly Thr Thr Asp Phe Ile His Leu Lys Lys His Lys Ala Ala
 865 870 875 880
 Leu Ala Ala Ala Gln Tyr Lys Ser Ser Asn Ala Ser Glu Thr Glu Pro
 885 890 895
 Asn Ala Ile Lys Asn Gln Thr Leu Ser Ala Ser Leu Pro Leu Asp Ser
 900 905 910
 Thr Val Ile Cys Ser Thr Ile Asn Lys Ala Asn Ser Val Gly Asn Gly
 915 920 925
 Gln Ala Ser Gln Thr Ser Gln Pro Asn Tyr His Thr Lys Leu Lys Lys
 930 935 940
 Ala Trp Leu Thr Arg His
 945 950

<210> 3912

<211> 112

<212> PRT

<213> Homo sapiens

<400> 3912

Met Ile Ser Val His Cys Asn Leu Cys Leu Pro Gly Ser Ser Asn Phe
 1 5 10 15
 Cys Ala Ser Ala Ser Arg Val Ala Gly Ile Thr Gly Met His His His
 20 25 30

Val	Trp	Leu	Ile	Phe	Val	Phe	Leu	Val	Glu	Thr	Gly	Phe	His	His	Val
35				40				45							
Gly	Gln	Ala	Gly	Leu	Lys	Leu	Gln	Ala	Ser	Ser	Asp	Leu	Ser	Ala	Phe
50				55				60							
Gln	Ser	Ala	Gly	Ile	Thr	Gly	Gly	Ser	Gln	Cys	Ile	Leu	Pro	Ala	Asp
65				70				75				80			
Phe	Val	Phe	Cys	Cys	Cys	Cys	Phe	Phe	Val	Phe	Cys	Phe	Ser	Phe	Leu
85				90				95							
Ala	Leu	Leu	Gly	Ser	Leu	His	Val	Arg	Leu	Ser	Phe	Ile	Val	Cys	Phe
100				105				110							

<210> 3913

<211> 265

<212> PRT

<213> Homo sapiens

<400> 3913

Met	Arg	Asp	Leu	Gly	Glu	Asn	Thr	Ala	Ser	Arg	Arg	Asn	Ala	Pro	Ala
1				5					10					15	
His	Pro	Ser	Arg	Asn	Pro	His	His	Leu	Pro	Pro	Thr	Pro	Asp	Gln	Ser
			20					25					30		
Ser	Arg	Arg	Pro	Gly	Val	Ser	His	Gln	Arg	Ala	Glu	Arg	Ala	Phe	Glu
		35					40					45			
Leu	Leu	Leu	His	His	Asp	Gln	Asp	Ala	Leu	Gly	His	Leu	Val	His	Val
50						55					60				
Cys	Val	His	Gln	Ser	Cys	Ser	Glu	Ser	Pro	Gln	Gly	Leu	Phe	His	Asp
65				70						75				80	
Ala	His	Pro	Gly	Val	Thr	Leu	Thr	Leu	Gly	Gln	Glu	Glu	Lys	Ala	Cys
			85						90					95	
Pro	Glu	Asp	Ser	Ala	Ser	Ser	Ser	Ser	Ser	Leu	Pro	Ala	Pro	Ser	Val
		100						105					110		
Leu	Gly	Ala	His	Thr	Gly	Val	Gly	Pro	Gln	Ala	Gly	Gly	His	Val	Pro
	115						120					125			
Gly	Trp	Gln	Asp	Leu	Ser	Thr	Val	Lys	Leu	Asp	Ala	Pro	Ala	Gly	Pro
130					135						140				

Val Leu Pro Ala Arg Ile Pro Leu Pro Gln Asp Ala Leu His Thr Leu
 145 150 155 160
 Arg Ile Pro Ser Arg Cys Ser Gly Ala Cys Thr Glu Gly Leu Gly Pro
 165 170 175
 Ala Pro Gly Asn Ser Lys Glu Ala Asn Gly Phe Met Ser Arg Phe Cys
 180 185 190
 Gln Ile Ala Ser Glu Ala Ala Leu Phe Ala Val Ala Ala Glu Cys Arg
 195 200 205
 Ala Gly His Leu Ser Gly Gln Ser Gly Ala Leu Leu Pro Cys Ile Ser
 210 215 220
 Trp Ala Met Arg Gly Asp Leu Cys Pro Leu His Arg Ser Cys Val Pro
 225 230 235 240
 Cys Ala Cys Asp Arg Val Phe Pro Val Tyr Ser Met Leu Leu His Val
 245 250 255
 Phe Gln Phe Arg Phe Val Val Cys Glu
 260 265

<210> 3914

<211> 138

<212> PRT

<213> Homo sapiens

<400> 3914

Met Ser Thr Val Gly Leu Phe His Phe Pro Thr Pro Leu Thr Arg Ile
 1 5 10 15
 Cys Pro Ala Pro Trp Gly Leu Arg Leu Trp Glu Lys Leu Thr Leu Leu
 20 25 30
 Ser Pro Gly Ile Ala Val Thr Pro Val Gln Met Ala Gly Lys Lys Asp
 35 40 45
 Tyr Pro Ala Leu Leu Ser Leu Asp Glu Asn Glu Leu Glu Glu Gln Phe
 50 55 60
 Val Lys Gly His Gly Pro Gly Gly Gln Ala Thr Asn Lys Thr Ser Asn
 65 70 75 80
 Cys Val Val Leu Lys His Ile Pro Ser Gly Ile Val Val Lys Cys His
 85 90 95

Gln Thr Arg Ser Val Asp Gln Asn Arg Lys Leu Ala Arg Lys Ile Leu
 100 105 110
 Gln Glu Lys Val Asp Val Phe Tyr Asn Gly Glu Asn Ser Pro Val His
 115 120 125
 Lys Glu Lys Arg Glu Ala Ala Lys Lys Lys
 130 135

<210> 3915

<211> 297

<212> PRT

<213> Homo sapiens

<400> 3915

Met Tyr Ile Ser Pro Pro Lys Asp Trp Trp Asp Ala Gly Asp Pro Ser
 1 5 10 15
 Leu Pro Ile Arg Thr Pro Ala Met Ile Gly Cys Ser Phe Val Val Asn
 20 25 30
 Arg Lys Phe Phe Gly Glu Ile Gly Leu Leu Asp Pro Gly Met Asp Val
 35 40 45
 Tyr Gly Gly Glu Asn Ile Glu Leu Gly Ile Lys Val Trp Leu Cys Gly
 50 55 60
 Gly Ser Met Glu Val Leu Pro Cys Ser Arg Val Ala His Ile Glu Arg
 65 70 75 80
 Lys Lys Lys Pro Tyr Asn Ser Asn Ile Gly Phe Tyr Thr Lys Arg Asn
 85 90 95
 Ala Leu Arg Val Ala Glu Val Trp Met Asp Asp Tyr Lys Ser His Val
 100 105 110
 Tyr Ile Ala Trp Asn Leu Pro Leu Glu Asn Pro Gly Ile Asp Ile Gly
 115 120 125
 Asp Val Ser Glu Arg Arg Ala Leu Arg Lys Ser Leu Lys Cys Lys Asn
 130 135 140
 Phe Gln Trp Tyr Leu Asp His Val Tyr Pro Glu Met Arg Arg Tyr Asn
 145 150 155 160
 Asn Thr Val Ala Tyr Gly Glu Leu Arg Asn Asn Lys Ala Lys Asp Val
 165 170 175

Cys Leu Asp Gln Gly Pro Leu Glu Asn His Thr Ala Ile Leu Tyr Pro
 180 185 190
 Cys His Gly Trp Gly Pro Gln Leu Ala Arg Tyr Thr Lys Glu Gly Phe
 195 200 205
 Leu His Leu Gly Ala Leu Gly Thr Thr Thr Leu Leu Pro Asp Thr Arg
 210 215 220
 Cys Leu Val Asp Asn Ser Lys Ser Arg Leu Pro Gln Leu Leu Asp Cys
 225 230 235 240
 Asp Lys Val Lys Ser Ser Leu Tyr Lys Arg Trp Asn Phe Ile Gln Asn
 245 250 255
 Gly Ala Ile Met Asn Lys Gly Thr Gly Arg Cys Leu Glu Val Glu Asn
 260 265 270
 Arg Gly Leu Ala Gly Ile Asp Leu Ile Leu Arg Ser Cys Thr Gly Gln
 275 280 285
 Arg Trp Thr Ile Lys Asn Ser Ile Lys
 290 295

<210> 3916

<211> 978

<212> PRT

<213> Homo sapiens

<400> 3916

Met Ala Val Lys Thr Ser Glu Val Met Ala Gln Leu Thr Glu Ser Arg
 1 5 10 15
 Gln Ser Ile Leu Lys Leu Glu Ser Glu Leu Glu Asn Lys Asp Glu Ile
 20 25 30
 Leu Arg Asp Lys Phe Ser Leu Met Asn Glu Asn Arg Glu Leu Lys Val
 35 40 45
 Arg Val Ala Ala Gln Asn Glu Arg Leu Asp Leu Cys Gln Gln Glu Ile
 50 55 60
 Glu Ser Ser Arg Val Glu Leu Arg Ser Leu Glu Lys Ile Ile Ser Gln
 65 70 75 80
 Leu Pro Leu Lys Arg Glu Leu Phe Gly Phe Lys Ser Tyr Leu Ser Lys
 85 90 95

Tyr Gln Met Ser Ser Phe Ser Asn Lys Glu Asp Arg Cys Ile Gly Cys
 100 105 110
 Cys Glu Ala Asn Lys Leu Val Ile Ser Glu Leu Arg Ile Lys Leu Ala
 115 120 125
 Ile Lys Glu Ala Glu Ile Gln Lys Leu His Ala Asn Leu Thr Ala Asn
 130 135 140
 Gln Leu Ser Gln Ser Leu Ile Thr Cys Asn Asp Ser Gln Glu Ser Ser
 145 150 155 160
 Lys Leu Ser Ser Leu Glu Thr Glu Pro Val Lys Leu Gly Gly His Gln
 165 170 175
 Val Ala Glu Ser Val Lys Asp Gln Asn Gln His Thr Met Asn Lys Gln
 180 185 190
 Tyr Glu Lys Glu Arg Gln Arg Leu Val Thr Gly Ile Glu Glu Leu Arg
 195 200 205
 Thr Lys Leu Ile Gln Ile Glu Ala Glu Asn Ser Asp Leu Lys Val Asn
 210 215 220
 Met Ala His Arg Thr Ser Gln Phe Gln Leu Ile Gln Glu Glu Leu Leu
 225 230 235 240
 Glu Lys Ala Ser Asn Ser Ser Lys Leu Glu Ser Glu Met Thr Lys Lys
 245 250 255
 Cys Ser Gln Leu Leu Thr Leu Glu Lys Gln Leu Glu Glu Lys Ile Val
 260 265 270
 Ala Tyr Ser Ser Ile Ala Ala Lys Asn Ala Glu Leu Glu Gln Glu Leu
 275 280 285
 Met Glu Lys Asn Glu Lys Ile Arg Ser Leu Glu Thr Asn Ile Asn Thr
 290 295 300
 Glu His Glu Lys Ile Cys Leu Ala Phe Glu Lys Ala Lys Lys Ile His
 305 310 315 320
 Leu Glu Gln His Lys Glu Met Glu Lys Gln Ile Glu Arg Leu Glu Ala
 325 330 335
 Gln Leu Glu Lys Lys Asp Gln Gln Phe Lys Glu Gln Glu Lys Thr Met
 340 345 350
 Ser Met Leu Gln Gln Asp Ile Ile Cys Lys Gln His His Leu Glu Ser
 355 360 365
 Leu Asp Arg Leu Leu Thr Glu Ser Lys Gly Glu Met Lys Lys Glu Asn
 370 375 380

Met	Lys	Lys	Asp	Glu	Ala	Leu	Lys	Ala	Leu	Gln	Asn	Gln	Val	Ser	Glu	385	390	395	400
Glu	Thr	Ile	Lys	Val	Arg	Gln	Leu	Asp	Ser	Ala	Leu	Glu	Ile	Cys	Lys	405	410	415	
Glu	Glu	Leu	Val	Leu	His	Leu	Asn	Gln	Leu	Glu	Gly	Asn	Lys	Glu	Lys	420	425	430	
Phe	Glu	Lys	Gln	Leu	Lys	Lys	Lys	Ser	Glu	Glu	Val	Tyr	Cys	Leu	Gln	435	440	445	
Lys	Glu	Leu	Lys	Ile	Lys	Asn	His	Ser	Leu	Gln	Glu	Thr	Ser	Glu	Gln	450	455	460	
Asn	Val	Ile	Leu	Gln	His	Thr	Leu	Gln	Gln	Gln	Gln	Gln	Met	Leu	Gln	465	470	475	480
Gln	Glu	Thr	Ile	Arg	Asn	Gly	Glu	Leu	Glu	Asp	Thr	Gln	Thr	Lys	Leu	485	490	495	
Glu	Lys	Gln	Val	Ser	Lys	Leu	Glu	Gln	Glu	Leu	Gln	Lys	Gln	Arg	Glu	500	505	510	
Ser	Ser	Ala	Glu	Lys	Leu	Arg	Lys	Met	Glu	Glu	Lys	Cys	Glu	Ser	Ala	515	520	525	
Ala	His	Glu	Ala	Asp	Leu	Lys	Arg	Gln	Lys	Val	Ile	Glu	Leu	Thr	Gly	530	535	540	
Thr	Ala	Arg	Gln	Val	Lys	Ile	Glu	Met	Asp	Gln	Tyr	Lys	Glu	Glu	Leu	545	550	555	560
Ser	Lys	Met	Glu	Lys	Glu	Ile	Met	His	Leu	Lys	Arg	Asp	Gly	Glu	Asn	565	570	575	
Lys	Ala	Met	His	Phe	Ser	Gln	Leu	Asp	Met	Ile	Leu	Asp	Gln	Thr	Lys	580	585	590	
Thr	Glu	Leu	Glu	Lys	Lys	Thr	Asn	Ala	Val	Lys	Glu	Leu	Glu	Lys	Leu	595	600	605	
Gln	His	Ser	Thr	Glu	Thr	Glu	Leu	Thr	Glu	Ala	Leu	Gln	Lys	Arg	Glu	610	615	620	
Val	Leu	Glu	Thr	Glu	Leu	Gln	Asn	Ala	His	Gly	Glu	Leu	Lys	Ser	Thr	625	630	635	640
Leu	Arg	Gln	Leu	Gln	Glu	Leu	Arg	Asp	Val	Leu	Gln	Lys	Ala	Gln	Leu	645	650	655	
Ser	Leu	Glu	Glu	Lys	Tyr	Thr	Thr	Ile	Lys	Asp	Leu	Thr	Ala	Glu	Leu	660	665	670	

Arg Glu Cys Lys Met Glu Ile Glu Asp Glu Lys Gln Glu Leu Leu Glu			
675	680	685	
Met Asp Gln Ala Leu Lys Glu Arg Asn Trp Glu Leu Lys Gln Arg Ala			
690	695	700	
Ala Gln Val Thr His Leu Asp Met Thr Ile Arg Glu His Arg Gly Glu			
705	710	715	720
Met Glu Gln Lys Ile Ile Lys Leu Glu Gly Thr Leu Glu Lys Ser Glu			
725	730	735	
Leu Glu Leu Lys Glu Cys Asn Lys Gln Ile Glu Ser Leu Asn Asp Lys			
740	745	750	
Leu Gln Asn Ala Lys Glu Gln Leu Arg Glu Lys Glu Phe Ile Met Leu			
755	760	765	
Gln Asn Glu Gln Glu Ile Ser Gln Leu Lys Lys Glu Ile Glu Arg Thr			
770	775	780	
Gln Gln Arg Met Lys Glu Met Glu Ser Val Met Lys Glu Gln Glu Gln			
785	790	795	800
Tyr Ile Ala Thr Gln Cys Lys Glu Ala Ile Asp Leu Gly Gln Lys Leu			
805	810	815	
Arg Leu Thr Arg Glu Gln Val Gln Asn Ser His Thr Glu Leu Ala Glu			
820	825	830	
Ala Arg His Gln Gln Val Gln Ala Gln Arg Glu Ile Glu Arg Leu Ser			
835	840	845	
Ser Glu Leu Glu Asp Met Lys Gln Leu Ser Lys Glu Lys Asp Ala His			
850	855	860	
Gly Asn His Leu Ala Glu Glu Leu Gly Ala Ser Lys Val Arg Glu Ala			
865	870	875	880
His Leu Glu Ala Arg Met Gln Ala Glu Ile Lys Lys Leu Ser Ala Glu			
885	890	895	
Val Glu Ser Leu Lys Glu Ala Tyr His Met Glu Met Ile Ser His Gln			
900	905	910	
Glu Asn His Ala Lys Trp Lys Ile Ser Ala Asp Ser Gln Lys Ser Ser			
915	920	925	
Val Gln Gln Leu Asn Glu Gln Leu Glu Lys Ala Lys Leu Glu Leu Glu			
930	935	940	
Glu Ala Gln Asp Thr Val Ser Asn Leu His Gln Gln Val Gln Asp Arg			
945	950	955	960

Asn Glu Val Ile Glu Ala Ala Asn Glu Ala Leu Leu Thr Lys Gly Glu
 965 970 975

Asn Val

<210> 3917

<211> 874

<212> PRT

<213> Homo sapiens

<400> 3917

Met Ser Asp Gly Lys Val Gly Glu Ser Ser Lys Lys Ser Glu Ile Lys
 1 5 10 15
 Glu Ile Glu Tyr Thr Lys Leu Lys Lys Ser Lys Ile Glu Asp Ala Phe
 20 25 30
 Ser Lys Glu Gly Lys Ser Asp Val Leu Leu Lys Leu Val Leu Glu Gln
 35 40 45
 Gly Asp Ser Ser Glu Ile Leu Ser Lys Lys Asp Leu Pro Leu Asp Ser
 50 55 60
 Glu Asn Val Gln Lys Asp Leu Val Gly Leu Ala Ile Glu Asn Leu His
 65 70 75 80
 Lys Ser Glu Glu Met Leu Lys Glu Arg Gln Ser Asp Gln Asp Met Asn
 85 90 95
 His Ser Pro Asn Ile Gln Ser Gly Lys Asp Ile His Glu Gln Lys Asn
 100 105 110
 Thr Lys Glu Lys Asp Leu Ser Trp Ser Glu His Leu Phe Ala Pro Lys
 115 120 125
 Glu Ile Pro Tyr Ser Glu Asp Phe Glu Val Ser Ser Phe Lys Lys Glu
 130 135 140
 Ile Ser Ala Glu Leu Tyr Lys Asp Asp Phe Glu Val Ser Ser Leu Leu
 145 150 155 160
 Ser Leu Arg Lys Asp Ser Gln Ser Cys Arg Asp Lys Pro Gln Pro Met
 165 170 175
 Arg Ser Ser Thr Ser Gly Ala Thr Ser Phe Gly Ser Asn Glu Glu Ile
 180 185 190

Ser Glu Cys Leu Ser Glu Lys Ser Leu Ser Ile His Ser Asn Val His			
195	200	205	
Ser Asp Arg Leu Leu Glu Leu Lys Ser Pro Thr Glu Leu Met Lys Ser			
210	215	220	
Glu Glu Arg Ser Asp Val Glu His Glu Gln Gln Val Thr Glu Ser Pro			
225	230	235	240
Ser Leu Ala Ser Val Pro Thr Ala Asp Glu Leu Phe Asp Phe His Ile			
245	250	255	
Gly Asp Arg Val Leu Ile Gly Asn Val Gln Pro Gly Ile Leu Arg Phe			
260	265	270	
Lys Gly Glu Thr Ser Phe Ala Lys Gly Phe Trp Ala Gly Val Glu Leu			
275	280	285	
Asp Lys Pro Glu Gly Asn Asn Asn Gly Thr Tyr Asp Gly Ile Ala Tyr			
290	295	300	
Phe Glu Cys Lys Glu Lys His Gly Ile Phe Ala Pro Pro Gln Lys Ile			
305	310	315	320
Ser His Ile Pro Glu Asn Phe Asp Asp Tyr Val Asp Ile Asn Glu Asp			
325	330	335	
Glu Asp Cys Tyr Ser Asp Glu Arg Tyr Gln Cys Tyr Asn Gln Glu Gln			
340	345	350	
Asn Asp Thr Glu Gly Pro Lys Asp Arg Glu Lys Asp Val Ser Glu Tyr			
355	360	365	
Phe Tyr Glu Lys Ser Leu Pro Ser Val Asn Asp Ile Glu Ala Ser Val			
370	375	380	
Asn Arg Ser Arg Ser Leu Lys Ile Glu Thr Asp Asn Val Gln Asp Ile			
385	390	395	400
Ser Gly Val Leu Glu Ala His Val His Gln Gln Ser Ser Val Asp Ser			
405	410	415	
Gln Ile Ser Ser Lys Glu Asn Lys Asp Leu Ile Ser Asp Ala Thr Glu			
420	425	430	
Lys Val Ser Ile Ala Ala Glu Asp Asp Thr Leu Asp Asn Thr Phe Ser			
435	440	445	
Glu Glu Leu Glu Lys Gln Gln Gln Phe Thr Glu Glu Glu Asp Asn Leu			
450	455	460	
Tyr Ala Glu Ala Ser Glu Lys Leu Cys Thr Pro Leu Leu Asp Leu Leu			
465	470	475	480

Thr	Arg	Glu	Lys	Asn	Gln	Leu	Glu	Ala	Gln	Leu	Lys	Ser	Ser	Leu	Asn
				485					490					495	
Glu	Glu	Lys	Lys	Ser	Lys	Gln	Gln	Leu	Glu	Lys	Ile	Ser	Leu	Leu	Thr
			500					505					510		
Asp	Ser	Leu	Leu	Lys	Val	Phe	Val	Lys	Asp	Thr	Val	Asn	Gln	Leu	Gln
		515					520					525			
Gln	Ile	Lys	Lys	Thr	Arg	Asp	Glu	Lys	Ile	Gln	Leu	Ser	Asn	Gln	Glu
	530						535				540				
Leu	Leu	Gly	Asp	Asp	Gln	Lys	Lys	Val	Thr	Pro	Gln	Asp	Leu	Ser	Gln
545					550					555				560	
Asn	Val	Glu	Glu	Gln	Ser	Pro	Ser	Ile	Ser	Gly	Cys	Phe	Leu	Ser	Ser
				565					570					575	
Glu	Leu	Glu	Asp	Glu	Lys	Glu	Glu	Ile	Ser	Ser	Pro	Asp	Met	Cys	Pro
			580					585					590		
Arg	Pro	Glu	Ser	Pro	Val	Phe	Gly	Ala	Ser	Gly	Gln	Glu	Glu	Leu	Ala
		595					600					605			
Lys	Arg	Leu	Ala	Glu	Leu	Glu	Leu	Ser	Arg	Glu	Phe	Leu	Ser	Ala	Leu
	610					615					620				
Gly	Asp	Asp	Gln	Asp	Trp	Phe	Asp	Glu	Asp	Phe	Gly	Leu	Ser	Ser	Ser
625				630						635				640	
His	Lys	Ile	Gln	Lys	Asn	Lys	Ala	Glu	Glu	Thr	Ile	Val	Pro	Leu	Met
			645							650				655	
Ala	Glu	Pro	Lys	Arg	Val	Thr	Gln	Gln	Pro	Cys	Glu	Thr	Leu	Leu	Ala
		660								665			670		
Val	Pro	His	Thr	Ala	Glu	Glu	Val	Glu	Ile	Leu	Val	His	Asn	Ala	Ala
		675						680				685			
Glu	Glu	Leu	Trp	Lys	Trp	Lys	Glu	Leu	Gly	His	Asp	Leu	His	Ser	Ile
	690					695					700				
Ser	Ile	Pro	Thr	Lys	Leu	Leu	Gly	Cys	Ala	Ser	Lys	Gly	Leu	Asp	Ile
705				710						715				720	
Glu	Ser	Thr	Ser	Lys	Arg	Val	Tyr	Lys	Gln	Ala	Val	Phe	Asp	Leu	Thr
			725						730				735		
Lys	Glu	Ile	Phe	Glu	Glu	Ile	Phe	Ala	Glu	Asp	Pro	Asn	Leu	Asn	Gln
		740						745					750		
Pro	Val	Trp	Met	Lys	Pro	Cys	Arg	Ile	Asn	Ser	Ser	Tyr	Phe	Arg	Arg
		755					760						765		

Val Lys Asn Pro Asn Asn Leu Asp Glu Ile Lys Ser Phe Ile Ala Ser
 770 775 780
 Glu Val Leu Lys Leu Phe Ser Leu Lys Lys Glu Pro Asn His Lys Thr
 785 790 795 800
 Asp Trp Gln Lys Met Met Lys Phe Gly Arg Lys Lys Arg Asp Arg Val
 805 810 815
 Asp His Ile Leu Val Gln Glu Leu His Glu Glu Glu Ala Gln Trp Val
 820 825 830
 Asn Tyr Asp Glu Asp Glu Leu Cys Val Lys Met Gln Leu Ala Asp Gly
 835 840 845
 Ile Phe Glu Thr Leu Ile Lys Asp Thr Ile Asp Val Leu Asn Gln Ile
 850 855 860
 Ser Glu Lys Gln Gly Arg Met Leu Leu Val
 865 870

<210> 3918

<211> 169

<212> PRT

<213> Homo sapiens

<400> 3918

Met Leu His Pro Phe Thr Gly Ile Pro Ser Trp Phe Thr Met Ser Ser
 1 5 10 15
 Tyr Ile His His Met Ser Gly Leu Ser Gly Leu Pro Leu Pro Pro Trp
 20 25 30
 Arg Gly Ser Arg Gln His Asn Asn Ala His Phe Arg Val Gly Leu Leu
 35 40 45
 Gly Pro Leu Leu Ala Pro Ala Pro Ile Gly Ser Ile Pro Trp Ser Gln
 50 55 60
 Thr Leu Arg Trp Arg Ser Cys Ala Gly Val Tyr Trp Arg Val Leu Leu
 65 70 75 80
 Gly Thr Thr Pro Val Arg Gly Glu Gly Arg Arg Val Gly Gln Gln Glu
 85 90 95
 Lys Leu Gly Cys Glu Ala Phe Ser Ser Leu Ser Gln Phe His Arg Gln

100	105	110
Pro Trp Arg Trp Ala Gly Pro Ser Glu Leu Ser Pro Leu Arg Pro Arg		
115	120	125
Asp Gln Ala Ser Val His Pro His Ser Thr Ser Val Thr Thr Gly Ser		
130	135	140
Gly Ala Thr Ser Ala Arg Gly Thr Ala Trp Gly Gly Thr Arg Met Arg		
145	150	155
Gly Val Ser Arg Gln His Pro Trp Gln		160
165		

<210> 3919

<211> 221

<212> PRT

<213> Homo sapiens

<400> 3919

Met Ser Glu Leu Ile Ser Asn Gly Ile Gln Ile Tyr Gln Leu Pro Thr		
1	5	10
Asp Glu Glu Thr Ala Ala Gln Ala Asn Ser Ser Val Ser Gly Leu Leu		
20	25	30
Pro Phe Ala Val Val Gly Ser Thr Asp Glu Val Lys Val Gly Lys Arg		
35	40	45
Met Val Arg Gly Arg His Tyr Pro Trp Gly Val Leu Gln Val Glu Asn		
50	55	60
Glu Asn His Cys Asp Phe Val Lys Leu Arg Asp Met Leu Leu Cys Thr		
65	70	75
Asn Met Glu Asn Leu Lys Glu Lys Thr His Thr Gln His Tyr Glu Cys		
85	90	95
Tyr Arg Tyr Gln Lys Leu Gln Lys Met Gly Phe Thr Asp Val Gly Pro		
100	105	110
Asn Asn Gln Pro Val Ser Phe Gln Glu Ile Phe Glu Ala Lys Arg Gln		
115	120	125
Glu Phe Tyr Asp Gln Cys Gln Arg Glu Glu Glu Glu Leu Lys Gln Arg		
130	135	140
Phe Met Gln Arg Val Lys Glu Lys Glu Ala Thr Phe Lys Glu Ala Glu		

145 150 155 160
 Lys Glu Leu Gln Asp Lys Phe Glu His Leu Lys Met Ile Gln Gln Glu
 165 170 175
 Glu Ile Arg Lys Leu Glu Glu Glu Lys Lys Gln Leu Glu Gly Glu Ile
 180 185 190
 Ile Asp Phe Tyr Lys Met Lys Ala Ala Ser Glu Ala Leu Gln Thr Gln
 195 200 205
 Leu Ser Thr Asp Thr Lys Lys Asp Lys His Arg Lys Lys
 210 215 220

<210> 3920

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3920

Met Leu Phe Ile Glu Leu Val Leu Tyr Leu Pro Ser Val Ser Lys Phe
 1 5 10 15
 Ile Lys Ile Arg Asp Phe Leu Cys Phe Pro Arg Glu Asn Ser Thr Phe
 20 25 30
 Leu Leu Thr Val Arg Pro Val His Trp Cys Leu Ala Pro Val Gln Ala
 35 40 45
 Asn Gly Ser Ala Met Ser Ser Ala Pro Ile Ser Trp Arg Asp Gly Gln
 50 55 60
 Arg His Phe Gln Lys Cys Ser Ser Leu Gln Pro Phe Thr Trp Asn Lys
 65 70 75 80
 Cys His Lys Asp Leu Trp Arg Cys Phe Val Pro Gly Phe Ser Thr Val
 85 90 95
 Ser Ala Phe Gly Asp Glu Glu Glu Phe Leu Pro Ile Leu Val Val Leu
 100 105 110
 Ala Ser Ile Gly
 115

<210> 3921

<211> 978

<212> PRT

<213> Homo sapiens

<400> 3921

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Met Lys Ser Gly Met Ile Asn Leu Thr Ser Gly Leu Ala Thr Gly Val
  1             5             10             15
Thr Asn Lys Lys Glu Val Asp Glu Asp Lys Val Gly Ile Cys Thr Gln
      20             25             30
Lys His Ser Glu Asn Val Ser Lys Val Thr Ser Thr Thr Thr Val Lys
      35             40             45
Ser Lys Asp Thr Gln Glu Pro Asn Leu Ser Glu Thr Phe Asn Asn Asn
      50             55             60
Glu Ile Glu Lys Lys Arg Asn Leu Ile Pro Thr Asp Lys Lys Gly Lys
      65             70             75             80
Asp Asp Glu Ile Asn Thr His Phe Ser Leu Ile Ile Asp Asp Thr Glu
      85             90             95
Tyr Glu Lys Glu Val Leu Gly Ser Asp Ser Glu Ile Gly Tyr Lys Lys
      100            105            110
Lys Ile Asp Asn Ala Arg Glu Ser Ser Phe Lys Lys Asp Asp Lys Leu
      115            120            125
Phe Gln Leu Ser Ser Leu Lys Ser Lys Arg Asn Leu Gly Thr Thr Thr
      130            135            140
Asp Thr Leu Glu Ile Arg Thr Arg Thr Ser Ser Asn Glu Gly Arg Arg
      145            150            155            160
Asp Ser Pro Thr Gln Thr Cys Arg Asp Glu Glu His His Ser Asp Tyr
      165            170            175
Glu His Val Gln Asn Val Ile Glu Asn Ile Phe Glu Asp Val Leu Glu
      180            185            190
Leu Ser Ser Ser Pro Glu Pro Ala Tyr Tyr Ser Lys Leu Ser Tyr Asp
      195            200            205
Gln Ser Pro Pro Gly Asp Asn Val Leu Asn Val Ile Gln Glu Ile Ser
      210            215            220
Arg Asp Ser Ala Gln Ser Val Thr Thr Lys Lys Val Ser Ser Ser Thr
      225            230            235            240
Asn Lys Asn Ile Ser Ala Lys Glu Lys Glu Glu Glu Glu Arg Glu Lys

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	245		250		255
Glu Lys Val Arg Glu Glu Ile Lys Ser Glu Pro Ser Lys Pro Asp Asp					
	260		265		270
Pro Gln Asn Gln Gln Glu Ser Lys Pro Gly Ile Phe Pro Ala Lys Phe					
	275		280		285
Leu Glu Asp Val Ile Thr Glu Met Val Lys Gln Leu Ile Phe Ser Ser					
	290		295		300
Ile Pro Glu Thr Gln Ile Gln Asp Arg Cys Gln Asn Val Ser Asp Lys					
305		310		315	320
Gln Asn Gln Ala Lys Leu Tyr Asp Thr Ala Met Lys Leu Ile Asn Ser					
	325		330		335
Leu Leu Lys Glu Phe Ser Asp Ala Gln Ile Lys Val Phe Arg Pro Asp					
	340		345		350
Lys Gly Asn Gln Phe Pro Gly Gly Lys Val Ser Ser Val Pro Lys Val					
	355		360		365
Pro Pro Arg Tyr Lys Glu Pro Thr Thr Asp Glu Ala Pro Ser Ser Ile					
	370		375		380
Lys Ile Lys Ser Ala Asp Lys Met Pro Pro Met His Lys Met Met Arg					
385		390		395	400
Lys Pro Ser Ser Asp Lys Ile Pro Ser Ile Asp Lys Thr Leu Val Asn					
	405		410		415
Lys Val Val His Ser Ser Val Cys Asn Ile Leu Asn Asp Tyr Gly Ser					
	420		425		430
Gln Asp Ser Ile Trp Lys Asn Ile Asn Ser Asn Gly Glu Asn Leu Ala					
	435		440		445
Arg Arg Leu Thr Ser Ala Val Ile Asn Glu Ile Phe Gln His Gln Val					
	450		455		460
Asn Leu Ile Phe Cys Asp Glu Val Ser Val Ser Ala Cys Leu Pro Leu					
465		470		475	480
Glu Ser Lys Asp Val Val Lys Lys Val Gln Lys Leu Ala Gln Thr Ala					
	485		490		495
Ser Lys Glu Cys Gln Thr Ser Ser Pro Tyr Thr Ile Ile Leu Pro His					
	500		505		510
Lys Phe Leu Glu Asn Val Ile Ser Ala Leu Phe Ser Lys Ile Phe Ser					
	515		520		525
Thr Ile Ser Ser Thr Lys Thr Lys Glu Pro Glu Asp Asn Leu Ser Thr					

530	535	540	
Glu Leu Asn Phe Leu Gln Met Lys Leu Val Ser Ala Val Ala Thr Glu			
545	550	555	560
Ile Ser Gln Asp Lys Tyr Met Thr Ile Gln Tyr Val Glu Thr Leu Gln			
	565	570	575
Ser Asp Asp Asp Glu Ile Ile Gln Leu Val Val Gln Ser Val Tyr Asn			
	580	585	590
Asn Leu Leu Pro Gln Phe Gly Ser Gln Glu Ile Ile Gln Asn Cys Val			
	595	600	605
Thr Ser Gly Cys Lys Ile Leu Ser Glu Asn Ile Val Asp Leu Val Leu			
610	615	620	
Arg Glu Val Ala Ser Asn Gln Leu Gln Ser Tyr Phe Cys Gly Glu Leu			
625	630	635	640
Thr Pro His Gln Cys Val Glu Val Glu Asn Ile Val Glu Lys Ile Leu			
	645	650	655
Lys Asp Val Phe Gln Thr Thr Asp Val Pro Gln Pro Lys Pro Ser His			
	660	665	670
Ala Asp Lys Leu Ser Tyr Asn Ile Ile Glu Glu Ile Ala Val Lys Phe			
	675	680	685
Leu Ser Lys Leu Leu Ser Ile Phe Pro Lys Val His Lys Glu Arg Thr			
690	695	700	
Lys Ser Leu Glu Thr Asp Met Gln Lys Ile Thr Ser Lys Val Leu Asn			
705	710	715	720
Ser Val Gln Glu Phe Ile Ser Lys Ser Lys Ile Lys Leu Val Pro Pro			
	725	730	735
Thr Lys Glu Ser Pro Thr Val Pro Val Ala Asp Asn Ala Thr Ile Glu			
	740	745	750
Asn Ile Val Asn Ser Ile Tyr Thr Ser Val Leu Lys His Ser Gly Ser			
	755	760	765
Tyr Thr Ser Val Phe Lys Asp Leu Met Gly Lys Ser Asn Val Leu Ser			
770	775	780	
Asp Thr Ile Gly Phe Leu Met Val Asn Ala Ile Ser Asn Ser Glu Phe			
785	790	795	800
Gln Pro Gln Val Glu Glu Glu Val Ser Asn Ser Glu Leu Val Leu Glu			
	805	810	815
Ala Val Lys Ile Met Glu Lys Val Ile Lys Ile Ile Asp Glu Leu Lys			

820	825	830
Ser Lys Glu Lys Ser Ser Ser Arg Lys Gly Leu Thr Leu Asp Ala Lys		
835	840	845
Leu Leu Glu Glu Val Leu Ala Leu Phe Leu Ala Lys Leu Ile Arg Leu		
850	855	860
Pro Ser Ser Ser Ser Lys Asp Glu Lys Asn Leu Ser Lys Thr Glu Leu		
865	870	875
Asn Lys Ile Ala Ser Gln Leu Ser Lys Leu Val Thr Ala Glu Ile Ser		
885	890	895
Arg Ser Ser Ile Ser Leu Ile Ala Ser Asp Pro Glu Glu His Cys Leu		
900	905	910
Asn Pro Glu Asn Thr Glu Arg Ile Tyr Gln Val Val Asp Ser Val Tyr		
915	920	925
Ser Asn Ile Leu Gln Gln Ser Gly Thr Asn Lys Glu Phe Tyr Tyr Asp		
930	935	940
Ile Lys Asp Thr Asn Thr Ala Phe Pro Lys Lys Val Ala Ser Leu Ile		
945	950	955
Ile Asp Gly Val Ser Ser Phe Pro Leu Asp Thr Ile Asn Ser Thr Phe		
965	970	975
Lys Cys		

<210> 3922

<211> 140

<212> PRT

<213> Homo sapiens

<400> 3922

Met Leu Ser Ala Val Pro Leu Gly Pro Leu Leu Phe Leu Tyr Thr Leu
1 5 10 15
Ser Leu Cys Leu Ile Ser Phe Leu Ser Leu Ser Ser His Pro Thr Arg
20 25 30
Asn Thr His Ser Cys Gly Gly Glu Ser His Pro Phe Thr Phe Leu Phe
35 40 45
Phe Ser Phe Phe Phe Leu Pro Ser Phe Phe Phe Leu Phe Phe Leu Phe

50 55 60
 Phe Phe Phe Leu Thr Glu Ser Cys Ser Val Thr Gln Ala Gly Val Gln
 65 70 75 80
 Trp Arg Tyr Leu Gly Ser Leu Gln Pro Pro Pro Pro Arg Phe Lys Gln
 85 90 95
 Ser Ser Cys Leu Ser Leu Pro Ser Ile Trp Asn Tyr Arg Arg Val Pro
 100 105 110
 Pro Arg Pro Ala Ser Phe Cys Ile Ile Ser Arg Asp Gly Val Ser Pro
 115 120 125
 Cys Trp Pro Gly Trp Ser Arg Thr Pro Asp Leu Arg
 130 135 140

<210> 3923

<211> 126

<212> PRT

<213> Homo sapiens

<400> 3923

Met Tyr Pro Glu Pro Ser Leu Phe Leu Tyr Cys Pro Ser Lys Met Ser
 1 5 10 15
 Val Gln Gly Pro Gly Val Glu Glu Pro Val Val Cys Trp Gly Arg Ile
 20 25 30
 Leu Gly Trp His Ser Leu Arg His Pro Thr Ser Thr Ser Pro Met Leu
 35 40 45
 Phe His Met Val Pro Gly Ser Ser Thr Val Thr Ser Thr Leu Glu Met
 50 55 60
 Ala Thr Val Thr Cys Pro Ser His Arg Glu Thr Lys His Ser Pro Cys
 65 70 75 80
 Leu Pro Asp Ser Gly Val Cys Leu Leu Ser Phe Tyr His His Leu Pro
 85 90 95
 Pro Val Glu Gly Phe Leu Arg Asn Asp Leu Pro Gly Glu Asn Pro Phe
 100 105 110
 Ile Pro Arg Pro Pro Ser His Pro Ile Ile Gln Cys Ile Leu
 115 120 125

<210> 3924

<211> 926

<212> PRT

<213> Homo sapiens

<400> 3924

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Met His Phe Arg Asp Thr Ser Glu Arg Gln Ser Asp Ala Val Asn Glu
 1             5             10             15
Ser Ser Leu Asp Ser Val His Leu Gln Met Ile Lys Gly Met Leu Tyr
      20             25             30
Gln Gln Arg Gln Asp Phe Ser Ser Gln Asp Ser Val Ser Arg Lys Lys
      35             40             45
Val Leu Ser Leu Asn Leu Lys Gln Thr Ser Lys Thr Glu Glu Ile Lys
      50             55             60
Asn Val Leu Gly Gly Ser Thr Cys Tyr Asn Tyr Ser Val Lys Asp Leu
      65             70             75             80
Gln Glu Ile Ser Gly Ser Glu Leu Cys Phe Pro Ser Gly Gln Lys Ile
      85             90             95
Lys Ser Ala Tyr Leu Pro Gln Arg Gln Ile His Ile Pro Ala Val Phe
      100            105            110
Gln Ser Pro Ala His Tyr Lys Gln Thr Phe Thr Ser Cys Leu Ile Glu
      115            120            125
His Leu Asn Ile Leu Leu Phe Gly Leu Ala Gln Asn Leu Gln Lys Ala
      130            135            140
Leu Ser Lys Val Asp Ile Ser Phe Tyr Thr Ser Leu Lys Gly Glu Lys
      145            150            155            160
Leu Lys Asn Ala Glu Asn Asn Val Pro Ser Cys His His Ser Gln Pro
      165            170            175
Ala Lys Leu Val Met Val Lys Lys Glu Gly Pro Asn Lys Gly Arg Leu
      180            185            190
Phe Tyr Thr Cys Asp Gly Pro Lys Ala Asp Arg Cys Lys Phe Phe Lys
      195            200            205
Trp Leu Glu Asp Val Thr Pro Gly Tyr Ser Thr Gln Glu Gly Ala Arg
      210            215            220
Pro Gly Met Val Leu Ser Asp Ile Lys Ser Ile Gly Leu Tyr Leu Arg

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225 230 235 240
 Ser Gln Lys Ile Pro Leu Tyr Glu Glu Cys Gln Leu Leu Val Arg Lys
 245 250 255
 Gly Phe Asp Phe Gln Arg Lys Gln Tyr Gly Lys Leu Lys Lys Phe Thr
 260 265 270
 Thr Val Asn Pro Glu Phe Tyr Asn Glu Pro Lys Thr Lys Leu Tyr Leu
 275 280 285
 Lys Leu Ser Arg Lys Glu Arg Ser Ser Ala Tyr Ser Lys Asn Asp Leu
 290 295 300
 Trp Val Val Ser Lys Thr Leu Asp Phe Glu Leu Asp Thr Phe Ile Ala
 305 310 315 320
 Cys Ser Ala Phe Phe Gly Pro Ser Ser Ile Asn Glu Ile Glu Ile Leu
 * 325 330 335
 Pro Leu Lys Gly Tyr Phe Pro Ser Asn Trp Pro Thr Asn Met Val Val
 340 345 350
 His Ala Leu Leu Val Cys Asn Ala Ser Thr Glu Leu Thr Thr Leu Lys
 355 360 365
 Asn Ile Gln Asp Tyr Phe Asn Pro Ala Thr Leu Pro Leu Thr Gln Tyr
 370 375 380
 Leu Leu Thr Thr Ser Ser Pro Thr Ile Val Ser Asn Lys Arg Val Ser
 385 390 395 400
 Lys Arg Lys Phe Ile Pro Pro Ala Phe Thr Asn Val Ser Thr Lys Phe
 405 410 415
 Glu Leu Leu Ser Leu Gly Ala Thr Leu Lys Leu Ala Ser Glu Leu Ile
 420 425 430
 Gln Val His Lys Leu Asn Lys Asp Gln Ala Thr Ala Leu Ile Gln Ile
 435 440 445
 Ala Gln Met Met Ala Ser His Glu Ser Ile Glu Glu Val Lys Glu Leu
 450 455 460
 Gln Thr His Thr Phe Pro Ile Thr Ile Ile His Gly Val Phe Gly Ala
 465 470 475 480
 Gly Lys Ser Tyr Leu Leu Ala Val Val Ile Leu Phe Phe Val Gln Leu
 485 490 495
 Phe Glu Lys Ser Glu Ala Pro Thr Ile Gly Asn Ala Arg Pro Trp Lys
 500 505 510
 Leu Leu Ile Ser Ser Ser Thr Asn Val Ala Val Asp Arg Val Leu Leu

515	520	525
Gly Leu Leu Ser Leu Gly Phe Glu Asn Phe Ile Arg Val Gly Ser Val		
530	535	540
Arg Lys Ile Ala Lys Pro Ile Leu Pro Tyr Ser Leu His Ala Gly Ser		
545	550	555
Glu Asn Glu Ser Glu Gln Leu Lys Glu Leu His Ala Leu Met Lys Glu		
565	570	575
Asp Leu Thr Pro Thr Glu Arg Val Tyr Val Arg Lys Ser Ile Glu Gln		
580	585	590
His Lys Leu Gly Thr Asn Arg Thr Leu Leu Lys Gln Val Arg Val Val		
595	600	605
Gly Val Thr Cys Ala Ala Cys Pro Phe Pro Cys Met Asn Asp Leu Lys		
610	615	620
Phe Pro Val Val Val Leu Asp Glu Cys Ser Gln Ile Thr Glu Pro Ala		
625	630	635
Ser Leu Leu Pro Ile Ala Arg Phe Glu Cys Glu Lys Leu Ile Leu Val		
645	650	655
Gly Asp Pro Lys Gln Leu Pro Pro Thr Ile Gln Gly Ser Asp Ala Ala		
660	665	670
His Glu Asn Gly Leu Glu Gln Thr Leu Phe Asp Arg Leu Cys Leu Met		
675	680	685
Gly His Lys Pro Ile Leu Leu Arg Thr Gln Tyr Arg Cys His Pro Ala		
690	695	700
Ile Ser Ala Ile Ala Asn Asp Leu Phe Tyr Lys Gly Ala Leu Met Asn		
705	710	715
Gly Val Thr Glu Ile Glu Arg Ser Pro Leu Leu Glu Trp Leu Pro Thr		
725	730	735
Leu Cys Phe Tyr Asn Val Lys Gly Leu Glu Gln Ile Glu Arg Asp Asn		
740	745	750
Ser Phe His Asn Val Ala Glu Ala Thr Phe Thr Leu Lys Leu Ile Gln		
755	760	765
Ser Leu Ile Ala Ser Gly Ile Ala Gly Ser Met Ile Gly Val Ile Thr		
770	775	780
Leu Tyr Lys Ser Gln Met Tyr Lys Leu Cys His Leu Leu Ser Ala Val		
785	790	795
Asp Phe His His Pro Asp Ile Lys Thr Val Gln Val Ser Thr Val Asp		

	805		810		815										
Ala	Phe	Gln	Gly	Ala	Glu	Lys	Glu	Ile	Ile	Ile	Leu	Ser	Cys	Val	Arg
	820						825				830				
Thr	Arg	Gln	Val	Gly	Phe	Ile	Asp	Ser	Glu	Lys	Arg	Met	Asn	Val	Ala
	835						840				845				
Leu	Thr	Arg	Gly	Lys	Arg	His	Leu	Leu	Ile	Val	Gly	Asn	Leu	Ala	Cys
	850						855				860				
Leu	Arg	Lys	Asn	Gln	Leu	Trp	Gly	Arg	Val	Ile	Gln	His	Cys	Glu	Gly
865							870				875				880
Arg	Glu	Asp	Gly	Leu	Gln	His	Ala	Asn	Gln	Tyr	Glu	Pro	Gln	Leu	Asn
							885				890				895
His	Leu	Leu	Lys	Asp	Tyr	Phe	Glu	Lys	Gln	Val	Glu	Glu	Lys	Gln	Lys
							900				905				910
Lys	Lys	Ser	Glu	Lys	Glu	Lys	Ser	Lys	Asp	Lys	Ser	His	Ser		
							915				920				925

<210> 3925

<211> 1058

<212> PRT

<213> Homo sapiens

<400> 3925

Met	Ile	Ile	Cys	Leu	Leu	Met	Thr	Leu	Lys	Leu	Arg	Tyr	Leu	Pro	Thr
1				5					10					15	
Lys	Val	Leu	Gln	Leu	Glu	Ser	Cys	Leu	Glu	His	Lys	Ser	Arg	Ser	Ser
				20					25					30	
Pro	Ile	Ala	Leu	Ile	Asp	Glu	Lys	Ser	Thr	Asn	Ala	His	Leu	Ser	Leu
				35					40					45	
Pro	Gln	Lys	Ser	Pro	Ser	Leu	Ala	Lys	Glu	Val	Pro	Asp	Leu	Cys	Phe
				50					55					60	
Ser	Asp	Asp	Tyr	Phe	Ser	Asp	Lys	Gly	Ala	Ala	Lys	Glu	Glu	Lys	Pro
65							70				75				80
Lys	Asn	Asp	Gln	Glu	Pro	Val	Asn	Arg	Ile	Ile	Gln	Lys	Lys	Glu	Asn
							85				90				95
Asn	Asp	His	Phe	Glu	Leu	Asp	Cys	Thr	Gly	Pro	Ser	Ile	Lys	Ser	Pro

100	105	110
Ser Ser Ser Ile Ile Lys Lys Ala	Ser Phe Glu His Gly Lys Lys Gln	
115	120	125
Glu Asn Asp Leu Asp Leu Leu Ser Asp Phe Ile Met Leu Arg Asn Lys		
130	135	140
Tyr Lys Thr Cys Thr Ser Lys Thr Glu Val Thr Asn Ser Asp Glu Lys		
145	150	155
His Asp Lys Glu Ala Cys Ser Leu Thr Leu Gln Glu Glu Ser Pro Ile		
165	170	175
Val His Ile Asn Lys Thr Leu Glu Glu Ile Asn Gln Glu Arg Gly Thr		
180	185	190
Asp Ser Val Ile Glu Ile Gln Ala Ser Asp Ser Gln Cys Gln Ala Phe		
195	200	205
Cys Leu Leu Glu Ala Ala Ala Ser Pro Ile Leu Lys Asn Leu Val Ser		
210	215	220
Leu Cys Thr Leu Pro Thr Ala Asn Trp Lys Phe Ala Thr Val Ile Phe		
225	230	235
Asp Gln Thr Arg Phe Leu Leu Lys Glu Gln Glu Lys Val Val Ser Asp		
245	250	255
Ala Val Arg Gln Gly Thr Ile Asp Glu Arg Glu Met Thr Phe Lys His		
260	265	270
Ala Ala Leu Leu His Leu Leu Val Thr Ile Arg Asp Val Leu Leu Thr		
275	280	285
Cys Ser Leu Asp Thr Ala Leu Gly Tyr Leu Ser Lys Ala Lys Asp Ile		
290	295	300
Tyr Asn Ser Ile Leu Gly Pro Tyr Leu Gly Asp Ile Trp Arg Gln Leu		
305	310	315
Glu Ile Val Gln Phe Ile Arg Gly Lys Lys Pro Glu Thr Asn Tyr Lys		
325	330	335
Ile Gln Glu Leu Gln Cys Gln Ile Leu Ser Trp Met Gln Ser Gln Gln		
340	345	350
Gln Ile Lys Val Leu Ile Ile Ile Arg Met Asp Ser Asp Gly Glu Lys		
355	360	365
His Phe Leu Ile Lys Ile Leu Asn Lys Ile Glu Gly Leu Thr Leu Thr		
370	375	380
Val Leu His Ser Asn Glu Arg Lys Asp Phe Leu Glu Ser Glu Gly Val		

Leu Met Leu Asn Lys Gly Pro Ser Leu His Trp Ile Leu Leu Ala Thr
 675 680 685
 Leu Cys Gln Leu Gln Glu Leu Leu Pro Glu Val Pro Glu Lys Val Leu
 690 695 700
 Lys His Phe Cys Ser Ile Thr Ser Leu Phe Lys Ile Gly Ser Ser Ser
 705 710 715 720
 Ile Thr Lys Ser Pro Gln Ile Ser Ser Pro Gln Glu Asn Arg Asn Gln
 725 730 735
 Ile Ser Thr Leu Ser Ser Gln Ser Ser Ala Ser Asp Leu Asp Ser Val
 740 745 750
 Ile Gln Glu His Asn Glu Tyr Tyr Gln Tyr Leu Gly Leu Gly Glu Thr
 755 760 765
 Val Gln Glu Asp Lys Thr Thr Thr Leu Asn Asp Asn Ser Ser Ile Met
 770 775 780
 Glu Leu Lys Gly Ile Ser Ser Phe Leu Pro Pro Val Thr Ser Tyr Asn
 785 790 795 800
 Gln Thr Ser Tyr Trp Lys Asp Ser Ser Cys Lys Ser Asn Ile Gly Gln
 805 810 815
 Asn Thr Pro Phe Leu Ile Asn Ile Glu Ser Arg Arg Pro Ala Tyr Asn
 820 825 830
 Ser Phe Leu Asn His Ser Asp Ser Glu Ser Asp Val Phe Ser Leu Gly
 835 840 845
 Leu Thr Gln Met Asn Cys Glu Thr Ile Lys Ser Pro Thr Asp Thr Gln
 850 855 860
 Lys Arg Val Ser Val Val Pro Arg Phe Ile Asn Ser Gln Lys Arg Arg
 865 870 875 880
 Thr His Glu Ala Lys Gly Phe Ile Asn Lys Asp Val Ser Asp Pro Ile
 885 890 895
 Phe Ser Leu Glu Gly Thr Gln Ser Pro Leu His Trp Asn Phe Lys Lys
 900 905 910
 Asn Ile Trp Glu Gln Glu Asn His Pro Phe Asn Leu Gln Tyr Gly Ala
 915 920 925
 Gln Gln Thr Ala Cys Asn Lys Leu Tyr Ser Gln Lys Gly Asn Leu Phe
 930 935 940
 Thr Asp Gln Gln Lys Cys Leu Ser Asp Glu Ser Glu Gly Leu Thr Cys
 945 950 955 960

Glu Ser Ser Lys Asp Glu Thr Phe Trp Arg Glu Leu Pro Ser Val Pro
 965 970 975
 Ser Leu Asp Leu Phe Arg Ala Ser Asp Ser Asn Ala Asn Gln Lys Glu
 980 985 990
 Phe Asn Ser Leu Tyr Phe Tyr Gln Arg Ala Gly Lys Ser Leu Gly Gln
 995 1000 1005
 Lys Arg His His Glu Ser Ser Phe Asn Ser Gly Asp Lys Glu Ser Leu
 1010 1015 1020
 Thr Gly Phe Met Cys Ser Gln Leu Pro Gln Phe Lys Lys Arg Arg Leu
 1025 1030 1035 1040
 Ala Tyr Glu Lys Val Pro Gly Arg Val Asp Gly Gln Thr Arg Leu Arg
 1045 1050 1055
 Phe Phe

<210> 3926

<211> 539

<212> PRT

<213> Homo sapiens

<400> 3926

Met Pro Gly Gln Arg Arg Ala Leu Ser Pro Lys Met Ala Ser Met Arg
 1 5 10 15
 Glu Ser Asp Thr Gly Leu Trp Leu His Asn Lys Leu Gly Ala Thr Asp
 20 25 30
 Glu Leu Trp Ala Pro Pro Ser Ile Ala Ser Leu Leu Thr Ala Ala Val
 35 40 45
 Ile Asp Asn Ile Arg Leu Cys Phe His Gly Leu Ser Ser Ala Val Lys
 50 55 60
 Leu Lys Leu Leu Leu Gly Thr Leu His Leu Pro Arg Arg Thr Val Asp
 65 70 75 80
 Glu Met Lys Gly Ala Leu Met Glu Ile Ile Gln Leu Ala Ser Leu Asp
 85 90 95
 Ser Asp Pro Trp Val Leu Met Val Ala Asp Ile Leu Lys Ser Phe Pro
 100 105 110

Asp Thr Gly Ser Leu Asn Leu Glu Leu Glu Glu Gln Asn Pro Asn Val
 115 120 125
 Gln Asp Ile Leu Gly Glu Leu Arg Glu Lys Val Gly Glu Cys Glu Ala
 130 135 140
 Ser Ala Met Leu Pro Leu Glu Cys Gln Tyr Leu Asn Lys Asn Ala Leu
 145 150 155 160
 Thr Thr Leu Ala Gly Pro Leu Thr Pro Pro Val Lys His Phe Gln Leu
 165 170 175
 Lys Arg Lys Pro Lys Ser Ala Thr Leu Arg Ala Glu Leu Leu Gln Lys
 180 185 190
 Ser Thr Glu Thr Ala Gln Gln Leu Lys Arg Ser Ala Gly Val Pro Phe
 195 200 205
 His Ala Lys Gly Arg Gly Leu Leu Arg Lys Met Asp Thr Thr Thr Pro
 210 215 220
 Leu Lys Gly Ile Pro Lys Gln Ala Pro Phe Arg Ser Pro Thr Ala Pro
 225 230 235 240
 Ser Val Phe Ser Pro Thr Gly Asn Arg Thr Pro Ile Pro Pro Ser Arg
 245 250 255
 Thr Leu Leu Arg Lys Glu Arg Gly Val Lys Leu Leu Asp Ile Ser Glu
 260 265 270
 Leu Asp Met Val Gly Ala Gly Arg Glu Ala Lys Arg Arg Arg Lys Thr
 275 280 285
 Leu Asp Ala Glu Val Val Glu Lys Pro Ala Lys Glu Glu Thr Val Val
 290 295 300
 Glu Asn Ala Thr Pro Asp Tyr Ala Ala Gly Leu Val Ser Thr Gln Lys
 305 310 315 320
 Leu Gly Ser Leu Asn Asn Glu Pro Ala Leu Pro Ser Thr Ser Tyr Leu
 325 330 335
 Pro Ser Thr Pro Ser Val Val Pro Ala Ser Ser Tyr Ile Pro Ser Ser
 340 345 350
 Glu Thr Pro Pro Ala Pro Ser Ser Arg Glu Ala Ser Arg Pro Pro Glu
 355 360 365
 Glu Pro Ser Ala Pro Ser Pro Thr Leu Pro Ala Gln Phe Lys Gln Arg
 370 375 380
 Ala Pro Met Tyr Asn Ser Gly Leu Ser Pro Ala Thr Pro Thr Pro Ala
 385 390 395 400

Ala	Pro	Thr	Ser	Pro	Leu	Thr	Pro	Thr	Thr	Pro	Pro	Ala	Val	Ala	Pro			
				405							410			415				
Thr	Thr	Gln	Thr	Pro	Pro	Val	Ala	Met	Val	Ala	Pro	Gln	Thr	Gln	Ala			
				420							425			430				
Pro	Ala	Gln	Gln	Gln	Pro	Lys	Lys	Asn	Leu	Ser	Leu	Thr	Arg	Glu	Gln			
				435							440			445				
Met	Phe	Ala	Ala	Gln	Glu	Met	Phe	Lys	Thr	Ala	Asn	Lys	Val	Thr	Arg			
				450							455			460				
Pro	Glu	Lys	Ala	Leu	Ile	Leu	Gly	Phe	Met	Ala	Gly	Ser	Arg	Glu	Asn			
465							470							475			480	
Pro	Cys	Gln	Glu	Gln	Gly	Asp	Val	Ile	Gln	Ile	Lys	Leu	Ser	Glu	His			
				485							490			495				
Thr	Glu	Asp	Leu	Pro	Lys	Ala	Asp	Gly	Gln	Gly	Ser	Thr	Thr	Met	Leu			
				500							505			510				
Val	Asp	Thr	Val	Phe	Glu	Met	Asn	Tyr	Ala	Thr	Gly	Gln	Trp	Thr	Arg			
				515							520			525				
Phe	Lys	Lys	Tyr	Lys	Pro	Met	Thr	Asn	Val	Ser								
530							535											

<210> 3927

<211> 712

<212> PRT

<213> Homo sapiens

<400> 3927

Met	Leu	Lys	Asp	Tyr	Leu	Ser	Val	Ala	Arg	Asp	Ala	Leu	Arg	Thr	Gln
1					5					10					15
Lys	Glu	Leu	Tyr	His	Val	Lys	Glu	Gln	Arg	Leu	Ala	Leu	Ala	Leu	Asp
				20				25						30	
Glu	Tyr	Val	Arg	Leu	Asn	Asp	Ala	Tyr	Lys	Glu	Lys	Ser	Ser	Ser	His
				35				40					45		
Thr	Ser	Leu	Phe	Ser	Gly	Ser	Ser	Ser	Ser	Thr	Lys	Tyr	Asp	Pro	Asp
	50					55					60				
Ile	Leu	Lys	Ala	Glu	Ile	Ser	Thr	Thr	Arg	Leu	Arg	Val	Lys	Glu	Leu
65					70						75				80

Thr Glu Leu Tyr Tyr Ser Ser Gln Ser Asp Gln Ile Asp Val Asp Tyr
 370 375 380
 Gln Tyr Lys Leu Asp Phe Leu Leu Gln Glu Lys Ser Gly Tyr Ile Pro
 385 390 395 400
 Ser Gly Pro Ile Thr Thr Ile His Glu Asn Glu Val Val Lys Ser Pro
 405 410 415
 Ser Gln Pro Gly Gln Ser Gly Leu Cys Gly Val Ala Ala Ala Ala Thr
 420 425 430
 Gly His Thr Pro Pro Leu Ala Glu Ala Pro Lys Ser Val Ala Ser Leu
 435 440 445
 Ser Ser Arg Ser Ser Leu Ser Ser Leu Ser Pro Pro Gly Ser Pro Leu
 450 455 460
 Val Leu Glu Gly Thr Phe Pro Met Ser Ser Ser His Asp Ala Ser Leu
 465 470 475 480
 His Gln Phe Thr Ala Asp Phe Glu Asp Cys Glu Leu Ser Ser His Phe
 485 490 495
 Ala Asp Ile Ser Leu Ile Glu Asn Gln Ile Leu Leu Asp Ser Asp Ser
 500 505 510
 Gly Gly Ala Ser Gln Ser Leu Ser Glu Asp Lys Asp Leu Asn Glu Cys
 515 520 525
 Ala Arg Glu Pro Leu Tyr Glu Gly Thr Ala Asp Val Glu Lys Ser Leu
 530 535 540
 Pro Lys Arg Arg Val Ile His Leu Leu Gly Glu Lys Thr Thr Cys Val
 545 550 555 560
 Ser Ala Ala Val Ser Asp Glu Ser Val Ala Gly Asp Ser Gly Val Tyr
 565 570 575
 Glu Ala Phe Val Lys Gln Pro Ser Glu Met Glu Asp Val Thr Tyr Ser
 580 585 590
 Glu Glu Asp Val Ala Ile Val Glu Thr Ala Gln Val Gln Ile Gly Leu
 595 600 605
 Arg Tyr Asn Ala Lys Ser Ser Ser Phe Met Val Ile Ile Ala Gln Leu
 610 615 620
 Arg Asn Leu His Ala Phe Leu Ile Pro His Thr Ser Lys Val Tyr Phe
 625 630 635 640
 Arg Val Ala Val Leu Pro Ser Ser Thr Asp Val Ser Cys Leu Phe Arg
 645 650 655

Thr Lys Val His Pro Pro Thr Glu Ser Ile Leu Phe Asn Asp Val Phe
 660 665 670
 Arg Val Ala Ile Ser Gln Thr Ala Leu Gln Gln Lys Thr Leu Arg Lys
 675 680 685
 Asn Phe Thr Phe Val Thr Ala Ile Thr His Gly Val Cys Leu Pro Leu
 690 695 700
 Pro Val Pro Met Pro Ser Phe Ala
 705 710

<210> 3928

<211> 100

<212> PRT

<213> Homo sapiens

<400> 3928

Met Gly Ser His Tyr Val Ala Gln Val Gly Val Gln Trp Leu Phe Ile
 1 5 10 15
 Gly Met Val Ile Val His Cys Ser Leu Glu Leu Val Ala Ser Ser Asp
 20 25 30
 Arg Pro Ala Ser Ala Ser Arg Val Ala Arg Thr Ile Tyr Ala His Pro
 35 40 45
 Phe Ala Trp Leu Lys Leu Tyr Ser Phe Cys Ser Tyr Pro His Pro Cys
 50 55 60
 Val Phe Ile Ser Arg Lys Ser Thr Ile Ser Phe Ile His Met Gly Leu
 65 70 75 80
 Thr Ile Ser Tyr His Gln Ser Ser Gly Val Met Asn Gly Met Leu Leu
 85 90 95
 Phe Tyr Leu Tyr
 100

<210> 3929

<211> 933

<212> PRT

<213> Homo sapiens

<400> 3929

Met Ser Cys Ser Leu Leu Pro Ala Leu Pro Leu Val Pro Pro Gly Thr
 1 5 10 15
 His Asn Pro Ile Lys Thr Asn Trp Met Ala Trp His Gly Gly Ser Cys
 20 25 30
 Leu Ser Ser Gln His Tyr Gly Gly Pro Arg Arg Val Asp His Leu Arg
 35 40 45
 Ser Gly Val Gln Asp Gln Pro Asp Gln His Gly Glu Thr Leu Ser Val
 50 55 60
 Leu Lys Ile Lys Lys Lys Leu Ala Arg Cys Gly Gly Val Arg Leu Gly
 65 70 75 80
 Arg Leu Arg Gln Glu Asn Arg Leu Asn Thr Ala Thr Ser Leu Thr Ala
 85 90 95
 Glu Gly Ala Val Ser Gln Asp His Ala Thr Ala Leu Gln Pro Gly Arg
 100 105 110
 Gln Ser Lys Thr Leu Ser Gln Arg Asn Lys Thr Asn Trp Arg Pro Pro
 115 120 125
 Gln Val Ala Gly Ser Gly Glu Gly Leu His Leu Cys Thr Pro Pro Trp
 130 135 140
 Leu Ser Val Ala Asp Pro Gln Ala Phe Asn Val Val Phe Glu Lys Ala
 145 150 155 160
 Ile Gln Arg Thr Thr Pro Ala Asn Glu Val Lys Gln Arg Val Ile Asn
 165 170 175
 Leu Thr Asp Glu Ile Thr Tyr Ser Val Tyr Met Tyr Thr Ala Arg Gly
 180 185 190
 Leu Phe Glu Arg Asp Lys Leu Ile Phe Leu Ala Gln Val Thr Phe Gln
 195 200 205
 Val Leu Ser Met Lys Lys Glu Leu Asn Pro Val Glu Leu Asp Phe Leu
 210 215 220
 Leu Arg Phe Pro Phe Lys Ala Gly Val Val Ser Pro Val Asp Phe Leu
 225 230 235 240

 Gln His Gln Gly Trp Gly Gly Ile Lys Ala Leu Ser Glu Met Asp Glu
 245 250 255
 Phe Lys Asn Leu Asp Ser Asp Ile Glu Gly Ser Ala Lys Arg Trp Lys

260	265	270
Lys Leu Val Glu Ser Glu Ala Pro Glu Lys Glu Ile Phe Pro Lys Glu		
275	280	285
Trp Lys Asn Lys Thr Ala Leu Gln Lys Leu Cys Met Val Arg Cys Leu		
290	295	300
Arg Pro Asp Arg Met Thr Tyr Ala Ile Lys Asn Phe Val Glu Glu Lys		
305	310	315
Met Gly Ser Lys Phe Val Glu Gly Arg Ser Val Glu Phe Ser Lys Ser		
325	330	335
Tyr Glu Glu Ser Ser Pro Ser Thr Ser Ile Phe Phe Ile Leu Ser Pro		
340	345	350
Gly Val Asp Pro Leu Lys Asp Val Glu Ala Leu Gly Lys Lys Leu Gly		
355	360	365
Phe Thr Ile Asp Asn Gly Lys Leu His Asn Val Ser Leu Gly Gln Gly		
370	375	380
Gln Glu Val Val Ala Glu Asn Ala Leu Asp Val Ala Ala Glu Lys Gly		
385	390	395
His Trp Val Ile Leu Gln Asn Ile His Leu Val Ala Arg Trp Leu Gly		
405	410	415
Thr Leu Asp Lys Lys Leu Glu Arg Tyr Ser Thr Gly Ser His Glu Asp		
420	425	430
Tyr Arg Val Phe Ile Ser Ala Glu Pro Ala Pro Ser Pro Glu Thr His		
435	440	445
Ile Ile Pro Gln Gly Ile Leu Glu Asn Ala Ile Lys Ile Thr Asn Glu		
450	455	460
Pro Pro Thr Gly Met His Ala Asn Leu His Lys Ala Leu Asp Leu Phe		
465	470	475
Thr Gln Asp Thr Leu Glu Met Cys Thr Lys Glu Met Glu Phe Lys Cys		
485	490	495
Met Leu Phe Ala Leu Cys Tyr Phe His Ala Val Val Ala Glu Arg Arg		
500	505	510
Lys Phe Gly Ala Gln Gly Trp Asn Arg Ser Tyr Pro Phe Asn Asn Gly		
515	520	525
Asp Leu Thr Ile Ser Ile Asn Val Leu Tyr Asn Tyr Leu Glu Ala Asn		
530	535	540
Pro Lys Val Pro Trp Asp Asp Leu Arg Tyr Leu Phe Gly Glu Ile Met		

545 550 555 560
 Tyr Gly Gly His Ile Thr Asp Asp Trp Asp Arg Arg Leu Cys Arg Thr
 565 570 575
 Tyr Leu Ala Glu Tyr Ile Arg Thr Glu Met Leu Glu Gly Asp Val Leu
 580 585 590
 Leu Ala Pro Gly Phe Gln Ile Pro Pro Asn Leu Asp Tyr Lys Gly Tyr
 595 600 605
 His Glu Tyr Ile Asp Glu Asn Leu Pro Pro Glu Ser Pro Tyr Leu Tyr
 610 615 620
 Gly Leu His Pro Asn Ala Glu Ile Gly Phe Leu Thr Val Thr Ser Glu
 625 630 635 640
 Lys Leu Phe Arg Thr Val Leu Glu Met Gln Pro Lys Glu Thr Asp Ser
 645 650 655
 Gly Ala Gly Thr Gly Val Ser Arg Glu Glu Lys Val Lys Ala Val Leu
 660 665 670
 Asp Asp Ile Leu Glu Lys Ile Pro Glu Thr Phe Asn Met Ala Glu Ile
 675 680 685
 Met Ala Lys Ala Ala Glu Lys Thr Pro Tyr Val Val Val Ala Phe Gln
 690 695 700
 Glu Cys Glu Arg Met Asn Ile Leu Thr Asn Glu Met Arg Arg Ser Leu
 705 710 715 720
 Lys Glu Leu Asn Leu Gly Leu Lys Gly Glu Leu Thr Ile Thr Thr Asp
 725 730 735
 Val Glu Asp Leu Ser Thr Ala Leu Phe Tyr Asp Thr Val Pro Asp Thr
 740 745 750
 Trp Val Ala Arg Ala Tyr Pro Ser Met Met Gly Leu Ala Ala Trp Tyr
 755 760 765
 Ala Asp Leu Leu Leu Arg Ile Arg Glu Leu Glu Ala Trp Thr Thr Asp
 770 775 780
 Phe Ala Leu Pro Thr Thr Val Trp Leu Ala Gly Phe Phe Asn Pro Gln
 785 790 795 800
 Ser Phe Leu Thr Ala Ile Met Gln Ser Met Ala Arg Lys Asn Glu Trp
 805 810 815
 Pro Leu Asp Lys Met Cys Leu Ser Val Glu Val Thr Lys Lys Asn Arg
 820 825 830
 Glu Asp Met Thr Ala Pro Pro Arg Glu Gly Ser Tyr Val Tyr Gly Leu

835 840 845
 Phe Met Glu Gly Ala Arg Trp Asp Thr Gln Thr Gly Val Ile Ala Glu
 850 855 860
 Ala Arg Leu Lys Glu Leu Thr Pro Ala Met Pro Val Ile Phe Ile Lys
 865 870 875 880
 Ala Ile Pro Val Asp Arg Met Glu Thr Lys Asn Ile Tyr Glu Cys Pro
 885 890 895
 Val Tyr Lys Thr Arg Ile Arg Gly Pro Thr Tyr Val Trp Thr Phe Asn
 900 905 910
 Leu Lys Thr Lys Glu Lys Ala Ala Lys Trp Ile Leu Ala Ala Val Ala
 915 920 925
 Leu Leu Leu Gln Val
 930

<210> 3930

<211> 108

<212> PRT

<213> Homo sapiens

<400> 3930

Met Glu Ser Arg Ser Val Ala Gln Ala Gly Val Gln Trp Asp Asn Phe
 1 5 10 15
 Ser Ser Leu Gln Pro Pro Pro Pro Gly Phe Glu Arg Phe Ser Cys Leu
 20 25 30
 Ser Leu Pro Ser Ser Trp Asp Cys Met Arg Pro Pro Pro His Leu Ala
 35 40 45
 Asn Phe Cys Ile Phe Ser Gly Asp Gly Val Ser Pro Arg Trp Pro Gly
 50 55 60
 Arg Tyr Arg Thr Pro Asp Leu Arg Arg Ser Thr Arg Leu Gly Leu Pro
 65 70 75 80
 Arg Cys Trp Asp Tyr Arg Arg Glu Thr Gln Arg Leu Ala Cys Pro Phe
 85 90 95
 Tyr Val Leu Pro Ser Phe Leu Phe Phe Ser Phe Leu
 100 105

<210> 3931

<211> 180

<212> PRT

<213> Homo sapiens

<400> 3931

```

Met Ser Arg Gly Cys Ser Ser Asp Leu Arg Phe His Thr Trp Leu Gly
  1             5             10             15
Leu Arg Met Leu Lys Asn Ile Ile Ala Val Ala Leu Leu Met Leu Gly
      20             25             30
Lys Asn Glu Lys Glu Ala Pro Ala Pro Pro Met Glu Pro Glu Val Pro
      35             40             45
Glu Met Ser Gln Ser Lys Thr Glu His Met Lys Thr Pro Glu Glu Glu
      50             55             60
Leu Gln Pro Glu Ser Ser Pro Ala Glu Thr Ser Ala Cys Lys Asp Pro
      65             70             75             80
Leu Lys Pro Leu Lys Ile Arg Pro Val Ser Gln Pro Phe Val Asn Pro
      85             90             95
Ala Val Lys Asn Lys Ala Glu Glu Cys Glu Thr Trp Ile Asp Arg Phe
      100            105            110
Arg Lys Leu Glu Asn Ala Leu Tyr Leu Cys Asp Leu Ser Asn Thr Gly
      115            120            125
Val Leu Glu Lys Glu Arg Ala Arg Arg Leu Ile His Asn Tyr Asn Leu
      130            135            140
Ile Tyr Asn Leu Ser Leu Ser Pro Gln Lys Ile Asp Gln Ala Leu Arg
      145            150            155            160
Arg Phe Arg Ser Gly Glu Asn Met Leu Leu Glu Pro Ala Leu Arg Tyr
      165            170            175
Leu Lys Glu Leu
      180

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<210> 3932

<211> 106

<212> PRT

<213> Homo sapiens

<400> 3932

```

Met Lys Trp Gln Arg Met Leu Cys Val His Gln Ile Pro Ser Cys Leu
  1             5             10             15
Pro Glu Tyr Ser Asp Tyr Asn Ser Gln Ser Pro Leu Tyr Leu Asp Gly
      20             25             30
Ala Val Glu Leu Phe Cys Gly Leu Cys Ser Val Gly Gly Ser Gly Ile
      35             40             45
Asn Leu Leu Cys Ser Pro Asn Ser Leu Ser Leu Cys Trp Arg Asp Val
      50             55             60
Gly Asp Leu Met Glu Asp Ala Glu Val Leu Gly Asp Val Arg Ala Met
      65             70             75             80
Arg Trp Lys Ser Pro Gly Pro Arg Val Thr Val Trp Asn Arg Asp Pro
      85             90             95
Thr Ala Leu Glu His Glu Ile Ser Glu Lys
      100             105

```

<210> 3933

<211> 656

<212> PRT

<213> Homo sapiens

<400> 3933

```

Met Ala Val Pro Met Pro Ser Lys Arg Arg Ser Leu Val Val Gln Thr
  1             5             10             15
Ser Met Asp Ala Tyr Thr Pro Pro Asp Thr Ser Ser Gly Ser Glu Asp
      20             25             30
Glu Gly Ser Val Gln Gly Asp Pro Gln Gly Thr Pro Thr Ser Ser Gln
      35             40             45
Gly Ser Ile Asn Met Glu His Trp Ile Ser Gln Ala Ile His Gly Ser
      50             55             60
Thr Thr Ser Thr Thr Ser Ser Ser Ser Thr Gln Ser Gly Gly Ser Gly
      65             70             75             80

```

Ala Ala His Arg Leu Ala Asp Val Met Ala Gln Thr His Ile Glu Asn
 85 90 95
 His Ser Ala Pro Pro Asp Val Thr Thr Tyr Thr Ser Glu His Ser Ile
 100 105 110
 Gln Val Glu Arg Pro Gln Gly Ser Thr Gly Ser Arg Thr Ala Pro Lys
 115 120 125
 Tyr Gly Asn Ala Glu Leu Met Glu Thr Gly Asp Gly Val Pro Val Ser
 130 135 140
 Ser Arg Val Ser Ala Lys Ile Gln Gln Leu Val Asn Thr Leu Lys Arg
 145 150 155 160
 Pro Lys Arg Pro Pro Leu Arg Glu Phe Phe Val Asp Asp Phe Glu Glu
 165 170 175
 Leu Leu Glu Val Gln Gln Pro Asp Pro Asn Gln Pro Lys Pro Glu Gly
 180 185 190
 Ala Gln Met Leu Ala Met Arg Gly Glu Gln Leu Gly Val Val Thr Asn
 195 200 205
 Trp Pro Pro Ser Leu Glu Ala Ala Leu Gln Arg Trp Gly Thr Ile Ser
 210 215 220
 Pro Lys Ala Pro Cys Leu Thr Thr Met Asp Thr Asn Gly Lys Pro Leu
 225 230 235 240
 Tyr Ile Leu Thr Tyr Gly Lys Leu Trp Thr Arg Ser Met Lys Val Ala
 245 250 255
 Tyr Ser Ile Leu His Lys Leu Gly Thr Lys Gln Glu Pro Met Val Arg
 260 265 270
 Pro Gly Asp Arg Val Ala Leu Val Phe Pro Asn Asn Asp Pro Ala Ala
 275 280 285
 Phe Met Ala Ala Phe Tyr Gly Cys Leu Leu Ala Glu Val Val Pro Val
 290 295 300
 Pro Ile Glu Val Pro Leu Thr Arg Lys Asp Ala Gly Ser Gln Gln Ile
 305 310 315 320
 Gly Phe Leu Leu Gly Ser Cys Gly Val Thr Val Ala Leu Thr Ser Asp
 325 330 335
 Ala Cys His Lys Gly Leu Pro Lys Ser Pro Thr Gly Glu Ile Pro Gln
 340 345 350
 Phe Lys Gly Trp Pro Lys Leu Leu Trp Phe Val Thr Glu Ser Lys His
 355 360 365

Leu Ser Lys Pro Pro Arg Asp Trp Phe Pro His Ile Lys Asp Ala Asn
 370 375 380
 Asn Asp Thr Ala Tyr Ile Glu Tyr Lys Thr Cys Lys Asp Gly Ser Val
 385 390 395 400
 Leu Gly Val Thr Val Thr Arg Thr Ala Leu Leu Thr His Cys Gln Ala
 405 410 415
 Leu Thr Gln Ala Cys Gly Tyr Thr Glu Ala Glu Thr Ile Val Asn Val
 420 425 430
 Leu Asp Phe Lys Lys Asp Val Gly Leu Trp His Gly Ile Leu Thr Ser
 435 440 445
 Val Met Asn Met Met His Val Ile Ser Ile Pro Tyr Ser Leu Met Lys
 450 455 460
 Val Asn Pro Leu Ser Trp Ile Gln Lys Val Cys Gln Tyr Lys Ala Lys
 465 470 475 480
 Val Ala Cys Val Lys Ser Arg Asp Met His Trp Ala Leu Val Ala His
 485 490 495
 Arg Asp Gln Arg Tyr Ile Asn Leu Ser Ser Leu Arg Met Leu Ile Val
 500 505 510
 Ala Asp Gly Ala Asn Pro Trp Ser Ile Ser Ser Cys Asp Ala Phe Leu
 515 520 525
 Asn Val Phe Gln Ser Lys Gly Leu Arg Gln Glu Val Ile Cys Pro Cys
 530 535 540
 Ala Ser Ser Pro Glu Ala Leu Thr Val Ala Ile Arg Arg Pro Thr Asp
 545 550 555 560
 Asp Ser Asn Gln Pro Pro Gly Arg Gly Val Leu Ser Met His Gly Leu
 565 570 575
 Thr Tyr Gly Val Ile Arg Val Asp Ser Glu Glu Lys Leu Ser Val Leu
 580 585 590
 Thr Val Gln Asp Val Gly Leu Val Met Pro Gly Ala Ile Met Cys Ser
 595 600 605
 Val Lys Pro Asp Gly Val Pro Gln Leu Cys Arg Thr Asp Glu Ile Gly
 610 615 620
 Glu Leu Cys Val Cys Ala Val Ala Thr Gly Thr Ser Tyr Tyr Gly Leu
 625 630 635 640
 Ser Gly Met Thr Lys Asn Thr Phe Glu His Thr Ser Asn Lys Gly Lys
 645 650 655

<210> 3934

<211> 181

<212> PRT

<213> Homo sapiens

<400> 3934

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Met Leu Ile Met Tyr Glu Gln Arg Lys Asp Ile Lys Leu Glu Leu Thr
  1             5             10             15
Phe Lys Gly Glu Ala Lys His Lys Arg Leu Lys Asn Leu Gln Thr Ser
      20             25             30
His Val Val Glu Lys Lys Ser Pro Phe Ser Gly Glu Gln Phe Arg Leu
      35             40             45
Ala Ala Glu Ile Cys Ile Ala Lys Arg Lys Ala His Ala Asp Ser His
      50             55             60
Asp Asn Gly Gly Asn Ala Ser Lys Ala Phe Gln Arg Ser Leu Trp Gln
      65             70             75             80
Pro Leu Pro Ser Gln Ala Trp Arg Pro Gly Arg Thr Glu Trp Phe Cys
      85             90             95
Gly Pro His Leu Glu Pro Asp Tyr Pro Val Gln Ala Trp Asp Thr Ala
      100            105            110
Pro Cys Ile Pro Ala Ile Leu Ala Pro Ala Val Ala Gln Arg Gly Pro
      115            120            125
Gly Thr Ala Trp Ala Thr Ala Ser Glu Gly Ala Asn His Lys Pro Trp
      130            135            140
Trp Phe Pro His Ala Val Lys Pro Val Gly Met Gln Ser Ala Arg Val
      145            150            155            160
Glu Ala Trp Glu Pro Pro Pro Gly Phe Gln Arg Met Cys Gly Lys Ala
      165            170            175
Trp Met Ser Arg Gln
      180

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<210> 3935

<211> 129

<212> PRT

<213> Homo sapiens

<400> 3935

Met Ala Cys Arg Glu Arg Ile Gly Asp Asn Ser Gly Pro Gln Arg Arg
 1 5 10 15
 Ala Ala Thr Glu Gly Glu Ala Gly Glu Arg Ala Ala Ala Pro Ala Leu
 20 25 30
 Gly Arg Val Leu Trp Ser Thr Gln Lys Asp Cys Pro Gly Ser Lys Gly
 35 40 45
 Pro Glu Glu Lys Ala Ala Leu Gly Ser Ala Pro Pro Ala Gly Ser Leu
 50 55 60
 Leu Pro Arg Glu Ala Glu Arg Cys Pro Pro Thr Arg Arg Ala Leu Cys
 65 70 75 80
 Tyr Pro Val Leu Ser Gly Phe Ala Glu Pro Ser Thr Thr Gln Pro Arg
 85 90 95
 Pro Pro Glu Lys Thr Pro Leu Thr Pro Thr Ser Cys His Pro Thr Ala
 100 105 110
 Cys Trp Gly Asp Arg Pro Gln Cys Leu Ile His Gly Leu Leu Arg Arg
 115 120 125
 Phe

<210> 3936

<211> 533

<212> PRT

<213> Homo sapiens

<400> 3936

Met Leu Pro Arg Gln Ala Ser Ile Ser Cys Ala Gln Gly Ile Leu Leu
 1 5 10 15
 Pro Gln Pro Ser Glu Leu Leu Arg Leu Gln Leu Asn Leu Val Met Asn
 20 25 30
 Glu Gln Lys Glu Lys Ile Thr Glu Lys Val Ile Leu Ser Met Thr Ala
 35 40 45

Lys Glu His His Lys Glu Gln Glu Glu Val Ser Arg Arg Ile Asp Glu
 50 55 60
 Leu Gln Thr Ala Ile Lys Ser Asn Ile Gly His Leu Cys Lys Leu Gly
 65 70 75 80
 Pro Gln Leu Gln Ala Glu Gln Glu Gln Phe Ser Ser Tyr Val Tyr Gln
 85 90 95
 His Ile Lys Ser Leu Pro Ala Asn Thr Leu Val Pro Gly Gly Leu Gln
 100 105 110
 Leu Lys Val Phe Glu Asn Gly Lys Asn Thr Gly Glu Ile Ser Val Gly
 115 120 125
 Ile Ser Lys Lys Asp Leu Gly Ser Asp Ser Pro Ile Gln Thr Asp His
 130 135 140
 Met Met Glu Arg Leu Leu Leu Lys Ile His Gln Arg Leu Gln Gly Ser
 145 150 155 160
 Ser Ile Asn Pro Pro Gly Leu Asn Tyr Ser Ser Met Arg Leu Phe Asp
 165 170 175
 Glu Asn Gly Gln Glu Ile Lys Asn Pro Leu Ser Leu Lys Asn Glu Gln
 180 185 190
 Lys Ile Trp Val Ser Tyr Gly Arg Ala Tyr Arg Ser Pro Leu Asn Leu
 195 200 205
 Ala Leu Gly Leu Thr Phe Asp Arg Val Ser Ala Phe Ala Arg Gly Asp
 210 215 220
 Ile Met Val Ala Tyr Lys Thr Phe Leu Asp Pro Asn Ala Val Leu Leu
 225 230 235 240
 Pro Gly Cys Gly Asn Trp Glu Val Cys Glu Gly Phe Pro Ile Asn Phe
 245 250 255
 Asn Cys Thr Ser Gln Gln Ile Pro Asp Gln Phe Glu Lys Val Asp Leu
 260 265 270
 Glu Asn His Phe Leu Gln Asn Lys Val Asp Pro Asn Ile Val Leu His
 275 280 285
 Ala Ser Val Ser Ile Gly Lys Trp Ser Phe Ser Gly Ser Glu Ala Ser
 290 295 300
 Ser Arg Ser Gln Ile Ala Pro Ser Ile Leu Trp Pro Val Ala Ser Val
 305 310 315 320
 Trp Leu Ile Thr Lys Thr Gly Met Ile Leu Ser Arg Ala Ile Thr Gln
 325 330 335

Gly Cys Leu Ala Ile Gly His Pro Ile Arg Val Lys Ala Ala Glu Gly
 340 345 350
 Thr Ser Leu Glu Gly Tyr Lys Leu Ile Leu Gln Lys Arg His Ser Gly
 355 360 365
 Asp Asp Ser Gln Lys Trp Val Phe Gly Thr Asp Gly Cys Ile Tyr Ser
 370 375 380
 Lys Ala Tyr Pro Gln Phe Val Leu Thr Tyr Leu Glu Glu Leu Asn Ala
 385 390 395 400
 Gln Val Asp Val Thr Gln Thr Glu Tyr His Ile His His Gly Ala Trp
 405 410 415
 Thr Thr Ala His Gln Glu His Gly Arg Asn Leu Ala Glu Glu Val Leu
 420 425 430
 Gln Glu Ser Ala Ser Asn Leu Gly Leu Lys Gln Leu Pro Glu Pro Ser
 435 440 445
 Asp Thr His Leu Met Pro Glu Gly Ser Leu Glu Glu Thr Gly Glu Leu
 450 455 460
 Thr Val Ala Leu Val Arg Lys Leu Glu Glu Lys His Pro Lys Ala Ser
 465 470 475 480
 Ala Gln Arg Trp Ala Ile Lys His Glu Gly Thr Ser Lys Pro Gly Gln
 485 490 495
 Trp Lys His Ser Arg Val Glu Asn Pro Leu Trp Asn Lys Leu Thr Tyr
 500 505 510
 Met Trp Pro Val Leu Pro Ser Gly Gln Leu Asn Glu Ala Met Gln Thr
 515 520 525
 Glu Gln Gly Arg Arg
 530

<210> 3937

<211> 234

<212> PRT

<213> Homo sapiens

<400> 3937

Met Leu Thr Thr Asp Asp Lys Ala Val Val Leu Lys Arg Ile His Glu
 1 5 10 15

Val His Val Lys Met Asp Arg Ser Leu Glu Tyr Gln Pro Val Glu Cys
 20 25 30
 Ala Ile Val Ile Asn Ala Ala Gly Ala Trp Ser Ala Gln Ile Ala Ala
 35 40 45
 Leu Ala Gly Val Gly Glu Gly Pro Pro Gly Thr Leu Gln Gly Thr Lys
 50 55 60
 Leu Pro Val Glu Pro Arg Lys Arg Tyr Val Tyr Val Trp His Cys Pro
 65 70 75 80
 Gln Gly Pro Gly Leu Glu Thr Pro Leu Val Ala Asp Thr Ser Gly Ala
 85 90 95
 Tyr Phe Arg Arg Glu Gly Leu Gly Ser Asn Tyr Leu Gly Gly Arg Ser
 100 105 110
 Pro Thr Glu Gln Glu Glu Pro Asp Pro Ala Asn Leu Glu Val Asp His
 115 120 125
 Asp Phe Phe Gln Asp Lys Val Trp Pro His Leu Ala Leu Arg Val Pro
 130 135 140
 Ala Phe Glu Thr Leu Lys Val Gln Ser Ala Trp Ala Gly Tyr Tyr Asp
 145 150 155 160
 Tyr Asn Thr Phe Asp Gln Asn Gly Val Val Gly Pro His Pro Leu Val
 165 170 175
 Val Asn Met Tyr Phe Ala Thr Gly Phe Ser Gly His Gly Leu Gln Gln
 180 185 190
 Ala Pro Gly Ile Gly Arg Ala Val Ala Glu Met Val Leu Lys Gly Arg
 195 200 205
 Phe Gln Thr Ile Asp Leu Ser Pro Phe Leu Phe Thr Arg Phe Tyr Leu
 210 215 220
 Gly Glu Lys Ile Gln Glu Asn Asn Ile Ile
 225 230

<210> 3938

<211> 232

<212> PRT

<213> Homo sapiens

<400> 3938

Met Ala Asn Tyr Tyr Glu Val Leu Gly Val Gln Ala Ser Ala Ser Pro
 1 5 10 15
 Glu Asp Ile Lys Lys Ala Tyr Arg Lys Leu Ala Leu Arg Trp His Pro
 20 25 30
 Asp Lys Asn Pro Asp Asn Lys Glu Glu Ala Glu Lys Lys Phe Lys Leu
 35 40 45
 Val Ser Glu Ala Tyr Glu Val Leu Ser Asp Ser Lys Lys Arg Ser Leu
 50 55 60
 Tyr Asp Arg Ala Gly Cys Asp Ser Trp Arg Ala Gly Gly Gly Ala Ser
 65 70 75 80
 Thr Pro Tyr His Ser Pro Phe Asp Thr Gly Tyr Thr Phe Arg Asn Pro
 85 90 95
 Glu Asp Ile Phe Arg Glu Phe Phe Gly Gly Leu Asp Pro Phe Ser Phe
 100 105 110
 Glu Phe Trp Asp Ser Pro Phe Asn Ser Asp Arg Gly Gly Arg Gly His
 115 120 125
 Gly Leu Arg Gly Ala Phe Ser Ala Gly Phe Gly Glu Phe Pro Ala Phe
 130 135 140
 Met Glu Ala Phe Ser Ser Phe Asn Met Leu Gly Cys Ser Gly Gly Ser
 145 150 155 160
 His Thr Thr Phe Ser Ser Thr Ser Phe Gly Gly Ser Ser Ser Gly Ser
 165 170 175
 Ser Gly Phe Lys Ser Val Met Ser Ser Thr Glu Met Ile Asn Gly His
 180 185 190
 Lys Val Thr Thr Lys Arg Ile Val Glu Asn Gly Gln Glu Arg Val Glu
 195 200 205
 Val Glu Glu Asp Gly Gln Leu Lys Ser Val Thr Val Asn Gly Lys Glu
 210 215 220
 Gln Leu Lys Trp Met Asp Ser Lys
 225 230

<210> 3939

<211> 140

<212> PRT

<213> Homo sapiens

<400> 3939

Met Ala Gln Gln Arg Ala Leu Pro Gln Ser Lys Glu Thr Leu Leu Gln
 1 5 10 15
 Ser Tyr Asn Lys Arg Leu Lys Asp Asp Ile Lys Ser Ile Met Asp Asn
 20 25 30
 Phe Thr Glu Ile Ile Lys Thr Ala Lys Ile Glu Asp Glu Thr Gln Val
 35 40 45
 Ser Arg Ala Thr Gln Gly Glu Gln Asp Asn Tyr Glu Met His Val Arg
 50 55 60
 Ala Ala Asn Ile Val Arg Ala Gly Glu Ser Leu Met Lys Leu Val Ser
 65 70 75 80
 Asp Leu Lys Gln Phe Leu Ile Leu Asn Asp Phe Pro Ser Val Asn Glu
 85 90 95
 Ala Ile Asp Gln Arg Asn Gln Gln Leu Arg Thr Leu Gln Glu Glu Cys
 100 105 110
 Asp Arg Lys Leu Ile Thr Leu Arg Asp Glu Ile Ser Ile Asp Leu Tyr
 115 120 125
 Glu Leu Glu Glu Glu Tyr Tyr Ser Ser Arg Tyr Lys
 130 135 140

<210> 3940

<211> 361

<212> PRT

<213> Homo sapiens

<400> 3940

Met Trp Lys Glu Asn Gly Lys Lys Pro Gly Ser Phe Pro Thr Gln Leu
 1 5 10 15
 Arg Pro Asn Tyr Gln Leu Asn Ser Ser Arg Asn Met Leu Thr Ser Thr
 20 25 30
 Ala Val Lys His Asp Leu Ala Glu Ser Phe Pro Phe Trp Ala Ser Lys
 35 40 45
 Gly Lys Leu Glu Trp Gln His Ile His Gln Gln Pro Pro Tyr Ser Lys
 50 55 60

Cys Phe Glu Asp His Leu Glu Gln Lys Tyr Val Gln Leu Phe Trp Gly
 65 70 75 80
 Leu Pro Ser Leu His Ser Glu Ser Leu His Pro Thr Val Phe Val Gln
 85 90 95
 His Gly Arg Ser Ser Met Phe Val Phe Phe Asn Gly Ile Thr Asn Thr
 100 105 110

 Ser Met Ser His Glu Ser Pro Val Leu Pro Pro Pro Gln Pro Leu Phe
 115 120 125
 Leu Pro Ser Thr Gln Pro Leu Pro Leu Pro Gln Thr Leu Pro Arg Gly
 130 135 140
 Gln Ser Leu His Leu Thr Gln Val Lys Ser Leu Ala Gln Pro Gln Ser
 145 150 155 160
 Pro Phe Pro Ala Leu Pro Pro Ser Pro Leu Phe Leu Ile Arg Val Cys
 165 170 175
 Gly Val Cys Phe His Arg Pro Gln Asn Glu Ala Arg Ser Leu Met Pro
 180 185 190
 Ser Glu Ile Asn His Leu Glu Trp Asn Val Leu Gln Lys Val Gln Glu
 195 200 205
 Ser Val Trp Gly Leu Pro Ser Val Val Gln Lys Ser Gln Glu Asp Phe
 210 215 220
 Cys Pro Pro Ala Pro Asn Pro Val Leu Val Arg Lys Ser Phe Lys Val
 225 230 235 240
 His Val Pro Ile Ser Ile Ile Pro Gly Asp Phe Pro Leu Ser Ser Glu
 245 250 255
 Val Arg Lys Lys Leu Glu Gln His Ile Arg Lys Arg Leu Ile Gln Arg
 260 265 270
 Arg Trp Gly Leu Pro Arg Arg Ile His Glu Ser Leu Ser Leu Leu Arg
 275 280 285
 Pro Gln Asn Lys Ile Ser Glu Leu Ser Val Ser Glu Ser Ile His Gly
 290 295 300
 Pro Leu Asn Ile Ser Leu Val Glu Gly Gln Arg Cys Asn Val Leu Lys
 305 310 315 320
 Lys Ser Ala Ser Ser Phe Pro Arg Ser Phe His Glu Arg Ser Ser Asn
 325 330 335
 Met Leu Ser Met Glu Asn Val Gly Asn Tyr Gln Gly Cys Ser Gln Glu

340 345 350
 Thr Ala Pro Lys Lys Pro Ser Leu Ala
 355 360

<210> 3941

<211> 266

<212> PRT

<213> Homo sapiens

<400> 3941

Met Ala Glu Ala Gly Lys Val Pro Leu Ser Leu Gly Leu Thr Gly Gly
 1 5 10 15
 Glu Ala Ala Glu Trp Pro Leu Gln Arg Tyr Ala Arg Cys Ile Pro Ser
 20 25 30
 Asn Thr Arg Asp Pro Pro Gly Pro Cys Leu Glu Ala Gly Thr Ala Pro
 35 40 45
 Cys Pro Thr Trp Lys Val Phe Asp Ser Asn Glu Glu Ser Gly Tyr Leu
 50 55 60
 Val Leu Thr Ile Val Ile Ser Gly His Phe Phe Ile Phe Gln Gly Gln
 65 70 75 80
 Thr Leu Leu Glu Gly Phe Ser Leu Ile Gly Ser Lys Asp Trp Leu Lys
 85 90 95
 Ile Val Arg Arg Val Asp Cys Leu Leu Phe Gly Thr Thr Ile Lys Asp
 100 105 110
 Lys Ser Arg Leu Phe Arg Val Gln Phe Ser Gly Glu Ser Lys Glu Gln
 115 120 125
 Ala Leu Glu His Cys Cys Ser Cys Val Gln Lys Leu Ala Gln Tyr Ile
 130 135 140
 Thr Val Gln Val Pro Asp Gly Asn Ile Gln Glu Leu Gln Leu Ile Pro
 145 150 155 160
 Gly Pro Pro Arg Ala Thr Glu Ser Gln Gly Lys Asp Ser Ala Lys Ser
 165 170 175
 Val Pro Arg Gln Pro Gly Ser His Gln His Ser Glu Gln Gln Gln Val
 180 185 190
 Cys Val Thr Ala Gly Thr Gly Ala Pro Asp Gly Arg Thr Ser Leu Thr

195	200	205
Gln Leu Ala Gln Thr Leu Leu Ala Ser Glu Glu Leu Pro His Val Tyr		
210	215	220
Glu Gln Ser Ala Trp Gly Ala Glu Glu Leu Gly Pro Phe Leu Arg Leu		
225	230	235
Cys Leu Met Asp Gln Asn Phe Pro Ala Phe Val Glu Glu Val Glu Lys		
245	250	255
Glu Leu Lys Lys Leu Ala Gly Leu Arg Asn		
260	265	

<210> 3942

<211> 104

<212> PRT

<213> Homo sapiens

<400> 3942

Met Gln Ser Ser Trp Gln Val Pro Leu His Pro Pro Gly Ser Pro Trp
1 5 10 15
Pro Gln Leu Thr Leu Arg Ile Leu Pro Val Trp Gly Val Leu Arg Glu
20 25 30
Pro Leu Gln Ile Val Leu Glu Gln Gln Leu Val Pro Gly Asp Pro Leu
35 40 45
His Gly Leu Gln His Val Val Leu Gln Arg Gln Val Pro Ala Tyr Leu
50 55 60
Leu Leu Leu Trp Gly Gln Arg Glu His Trp Ala Leu Gln Gly His Val
65 70 75 80
Cys Gly Cys Gln Pro His Arg Leu Leu Ala Thr Thr Ala Pro Gly Ser
85 90 95
Cys Pro Glu Leu Ala Ala Gln Asn
100

<210> 3943

<211> 1080

<212> PRT

<213> Homo sapiens

<400> 3943

Met Leu Arg Leu Pro Lys Lys Arg Leu Pro Arg Phe Glu Gln Val Gln
 1 5 10 15
 Asp Glu Asp Thr Tyr Leu Glu Asn Leu Ala Ile Gln Arg Asn Ala Ser
 20 25 30
 Ala Phe Phe Glu Lys Tyr Asp Arg Ser Glu Ile Gln Glu Leu Leu Thr
 35 40 45
 Thr Ala Leu Val Ser Trp Leu Ser Ala Lys Glu Asp Val Arg Ser Gln
 50 55 60
 Val Asp Leu Pro Cys Gly Ile Met Ser Gln Met Asn Asn Val Gly Phe
 65 70 75 80
 Ser Thr Ala Ile Leu Leu Thr Pro Val Asp Pro Thr Ala Leu Leu Asp
 85 90 95
 Tyr Arg Glu Val His Gln Met Ile Arg Glu Leu Ala Ile Gly Ile Tyr
 100 105 110
 Cys Leu Asn Gln Ile Pro Ser Ile Ser Leu Glu Ala Asn Tyr Asp Gln
 115 120 125
 Ser Ser Ser Cys Gln Leu Pro Pro Ala Tyr Tyr Asp Thr Arg Ile Gly
 130 135 140
 Gln Ile Leu Ile Asn Ile Asp Tyr Met Leu Lys Ala Leu Trp His Gly
 145 150 155 160
 Ile Tyr Met Pro Lys Glu Lys Arg Ala Arg Phe Ser Glu Leu Trp Arg
 165 170 175
 Ala Ile Met Asp Ile Asp Pro Asp Gly Lys Pro Gln Thr Asn Lys Asp
 180 185 190
 Ile Phe Ser Glu Phe Ser Ser Ala Gly Leu Thr Asp Ile Thr Arg Asp
 195 200 205
 Pro Asp Phe Asn Glu Ile Tyr Asp Glu Asp Val Asn Glu Asp Pro Thr
 210 215 220
 Tyr Asp Pro Asn Ser Pro Glu Glu Thr Ala Val Phe Met Lys Tyr Ala
 225 230 235 240
 Glu Asn Ile Met Leu Lys Leu Thr Phe Ser Thr Thr Gln Ile Gln Gln
 245 250 255
 Tyr Glu Asn Val Phe Ile Phe Glu Thr Gly Tyr Trp Leu Thr Asn Ala

260	265	270
Ile Lys Tyr Asn Gln Asp Tyr Leu Asp Ile Cys Thr Tyr Gln Arg Leu		
275	280	285
Gln Gln Arg Leu Tyr Leu Gln Lys Lys Ile Ile Gln Lys His Phe Glu		
290	295	300
Lys Lys Lys Asp Ile Arg Arg Gly Ile Gly Tyr Leu Lys Leu Ile Cys		
305	310	315
Phe Leu Ile Pro Phe Leu Leu Ser Leu Lys Lys Lys Met Lys Val Pro		
325	330	335
Tyr Leu Ser Ser Leu Leu Gln Pro Phe Ser Asp Asp Lys Val Lys Thr		
340	345	350
Glu Arg Glu Leu Pro Pro Phe Ile Tyr Gly Arg Asp Phe Lys Cys Gln		
355	360	365
Asn Phe His Tyr Lys Glu Asn Gln Tyr Phe His Val His Gly Gly Ile		
370	375	380
Glu Phe Asp Ile Ser Thr Pro Ser Ile Glu Asn Ala Leu Glu Asp Phe		
385	390	395
Gln Lys Asn Leu Glu Lys Ile Arg Asp Cys Ala Ala Asn Thr Phe Ile		
405	410	415
Glu Asp Ser Gly Tyr Lys Glu Tyr Tyr Ser Ile Pro Val Met Glu Phe		
420	425	430
His Gly Lys Ser Tyr Tyr Val Ile Tyr Phe Glu Leu Glu Thr Phe Tyr		
435	440	445
Gln Gln Leu Tyr Lys Thr Gln Trp Trp Gly Ala Ile Asn Glu Ile Val		
450	455	460
Asn Asn Leu Arg Leu Lys Arg Leu Pro Leu Thr Asp Ala Gln Leu His		
465	470	475
Glu Gln Phe Lys Lys Lys Leu Gly Phe Lys Arg Ala Met Lys Cys Lys		
485	490	495
Ser Ile Pro Phe Gly Met Lys Ser Ala Val Glu Arg Gly Leu Ser Ala		
500	505	510
Val Phe His Thr Phe Ser Arg Lys Thr Ser Ser Ser Thr Ile Asn Val		
515	520	525
Ser Asp Glu Ala Gly Tyr Thr Ile Phe His His Ala Ala Leu His Asn		
530	535	540
Arg Val Ser Ile Ile Cys Gln Leu Cys Asn Ala Asn Phe Lys Val Asn		

545 550 555 560
 Gln Arg Arg Phe Val Thr Phe Ser Gln Gly Pro Thr Pro Leu His Leu
 565 570 575
 Ala Ala Gln Ala Cys Ser Leu Glu Thr Thr Val Cys Leu Leu Cys Ser
 580 585 590
 Lys Ala Asp Tyr Thr Leu Ser Glu Lys Arg Gly Trp Met Pro Ile His
 595 600 605
 Phe Ala Ala Phe Tyr Asp Asn Val Cys Ile Ile Ile Ala Leu Cys Arg
 610 615 620
 Lys Asp Pro Ser Leu Leu Glu Ala Glu Ala Thr Ala Glu Asn Gln Cys
 625 630 635 640
 Thr Pro Leu Leu Leu Ala Ala Thr Ser Gly Ala Leu Asp Thr Ile Gln
 645 650 655
 Tyr Leu Phe Ser Ile Gly Ala Asn Trp Arg Lys Thr Asp Ile Lys Gly
 660 665 670
 Asn Asn Ile Ile His Leu Ser Val Leu Thr Phe His Thr Glu Val Leu
 675 680 685
 Lys Tyr Ile Ile Lys Leu Asn Ile Pro Glu Leu Pro Val Trp Lys Thr
 690 695 700
 Leu Val Glu Met Leu Gln Cys Glu Ser Tyr Lys Arg Arg Met Met Ala
 705 710 715 720
 Val Met Ser Leu Glu Val Ile Cys Leu Ala Asn Asp Gln Tyr Trp Arg
 725 730 735
 Cys Ile Leu Asp Ala Gly Thr Ile Pro Ala Leu Ile Asn Leu Leu Lys
 740 745 750
 Ser Ser Lys Ile Lys Leu Gln Cys Lys Thr Val Gly Leu Leu Ser Asn
 755 760 765
 Ile Ser Thr His Lys Ser Ala Val His Ala Leu Val Glu Ala Gly Gly
 770 775 780
 Ile Pro Ser Leu Ile Asn Leu Leu Val Cys Asp Glu Pro Glu Val His
 785 790 795 800
 Ser Arg Cys Ala Val Ile Leu Tyr Asp Ile Ala Gln Cys Glu Asn Lys
 805 810 815
 Asp Val Ile Ala Lys Tyr Asn Gly Ile Pro Ser Leu Ile Asn Leu Leu
 820 825 830
 Asn Leu Asn Ile Glu Asn Val Leu Val Asn Val Met Asn Cys Ile Arg

835	840	845
Val Leu Cys Ile Gly Asn Glu Asn Asn Gln Arg Ala Val Arg Glu His		
850	855	860
Lys Gly Leu Pro Tyr Leu Ile Arg Phe Leu Ser Ser Asp Ser Asp Val		
865	870	875
Leu Lys Ala Val Ser Ser Ala Ala Ile Ala Glu Val Gly Arg Asp Asn		
885	890	895
Lys Glu Ile Gln Asp Ala Ile Ala Met Glu Gly Ala Ile Pro Pro Leu		
900	905	910
Val Ala Leu Phe Lys Gly Lys Gln Ile Ser Val Gln Met Lys Gly Ala		
915	920	925
Met Ala Val Glu Ser Leu Ala Ser His Asn Ala Leu Ile Gln Lys Ala		
930	935	940
Phe Leu Glu Lys Ser Leu Thr Lys Tyr Leu Leu Lys Leu Leu Lys Ala		
945	950	955
Phe Gln Ile Asp Val Lys Glu Gln Gly Ala Val Ala Leu Trp Ala Leu		
965	970	975
Ala Gly Gln Thr Leu Lys Gln Gln Lys Tyr Met Ala Glu Gln Ile Gly		
980	985	990
Tyr Ser Phe Ile Ile Asn Met Leu Leu Ser Pro Ser Ala Lys Met Gln		
995	1000	1005
Tyr Val Gly Gly Glu Ala Val Ile Ala Leu Ser Lys Asp Ser Arg Met		
1010	1015	1020
His Gln Asn Gln Ile Cys Glu Gly Asn Gly Ile Ala Pro Leu Val Arg		
1025	1030	1035
Leu Leu Arg Ile Ser Thr Ile Ala Glu Gly Thr Leu Leu Ser Val Ile		
1045	1050	1055
Arg Ala Val Gly Ser Ile Cys Ile Gly Tyr Leu Leu Lys Ser Arg Leu		
1060	1065	1070
Cys Ile Asn Thr Phe Cys Leu Gln		
1075	1080	

<210> 3944

<211> 119

<212> PRT

<213> Homo sapiens

<400> 3944

Met Arg Lys Gly Asn Leu Leu Leu Ser Trp Leu Leu Gly Pro Glu Leu
 1 5 10 15
 Pro Glu Leu Ser Pro Arg Ala Arg Lys Ala Asp Leu Lys Asp Glu Asn
 20 25 30
 Leu Lys Phe Ser Cys Trp Trp Glu Pro Arg Lys Thr Ala Gly Val Leu
 35 40 45
 Thr Trp Pro Phe Leu Ala Glu Leu Ala Glu Val Gly Val Leu Ala Asp
 50 55 60
 Gly Met Tyr Leu Gly Ala Val Ser Val Ala Gln Gln Arg Cys Arg Ala
 65 70 75 80
 Asp Trp Leu Ser His Trp Val Leu Pro Ala Gly Ser Pro Leu His Trp
 85 90 95
 Ala Phe Thr Gln Pro Cys Ser Trp Val Ser Leu Pro Cys Lys Gln Ser
 100 105 110
 His Asn Asn Thr Arg Ile Val
 115

<210> 3945

<211> 108

<212> PRT

<213> Homo sapiens

<400> 3945

Met Glu Lys Thr Gln Thr Ile Gly Arg Gly Asp Glu His Val Ile Ile
 1 5 10 15
 Val Thr Thr Cys Leu Glu Ala Thr Arg Met Glu Trp Gly Arg Leu Lys
 20 25 30
 Glu Glu Ile Phe Thr Gly Leu Thr Ser His His Ser Ser Arg Val Val
 35 40 45
 Val Ile Thr Pro Glu Gly Lys Ile Ile Ser Val Phe Tyr Gly Leu Ile
 50 55 60
 Ile Gly Asp Ser Ser Cys Phe Glu Asp Thr Asn Thr Glu Ala Ser Ser

65 70 75 80
 Arg Thr Tyr Ser Gln Phe Pro Trp Ser Gln Cys Cys Gln Trp Phe Tyr
 85 90 95
 Lys Gly Leu Met Asn Leu Tyr Leu Val Asp His Lys
 100 105

<210> 3946

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3946

Met Gln Ala Ala Ser Leu Arg Ala Gly Ile Leu Gln Ile Val Gly Leu
 1 5 10 15
 Lys Ile Ile Arg Asn Val Glu Ala Leu Lys Ala Phe Leu Arg Asn Ser
 20 25 30
 Arg Ala Thr Met Ala His Gln Trp Cys Tyr Gly Ala Met Gly Ala Pro
 35 40 45
 Gln Phe Gly Leu Ser Tyr Leu Glu Gly Ser Ala Gly His Ser Ala Asn
 50 55 60
 Thr Pro Ala Phe His Ile Leu Gly Asp His Val Trp Met Ala Leu Met
 65 70 75 80
 Cys Pro Ile Leu Val Glu Glu His Arg Lys Ala Ser Phe Leu His Phe
 85 90 95
 Lys Glu Ala Arg Glu Thr Cys Glu Val Phe Ser Thr Ser Leu Val His
 100 105 110
 Pro

<210> 3947

<211> 150

<212> PRT

<213> Homo sapiens

<400> 3947

Met Ile Thr Ser Pro Cys Ser Pro Ala Ala Phe Pro Pro Pro Ser Thr
 1 5 10 15
 Ser Pro Thr Leu Arg Ala Pro His Leu Pro Ser His Pro Pro Pro Ser
 20 25 30
 Tyr Leu Phe Leu Tyr Asp Ser Ser Leu Arg Ala Ser Leu Ser Leu Val
 35 40 45
 Thr Ser Leu Ile Tyr Cys Lys Tyr Arg Lys Val Lys Ser Gly Gln Asn
 50 55 60
 Arg Gln Arg Ser Ser Trp Leu Ala Ser Asn Asn Ser Tyr Asn Asn Tyr
 65 70 75 80
 Ser Pro Val Asn Asn Ser Leu Leu Ser Ile Thr Ala Asp Met Phe Ser
 85 90 95
 Trp His Phe Gln Ala Tyr Ser Leu Ile Cys Phe Ser Lys Asn Ser Ile
 100 105 110
 Arg Val Glu Ala Thr Gly Lys Glu Ile Lys Phe Ile Ala Gly Tyr Gln
 115 120 125
 Arg Pro Arg Glu Ile Arg Glu Tyr Cys Tyr Cys Tyr Tyr Pro Tyr Tyr
 130 135 140
 Tyr His Cys Leu Lys Leu
 145 150

<210> 3948

<211> 129

<212> PRT

<213> Homo sapiens

<400> 3948

Met Thr Gln Thr His Ser Leu Arg Ser Val Phe Val Phe Gln Arg Tyr
 1 5 10 15
 Val Cys Ile Ser Pro Thr Leu Arg Phe Met Val Thr Gln Ser Arg Gly
 20 25 30
 Phe Ser Leu Ala Leu Pro Thr Ala Glu Thr Cys Ser Phe Leu Ala Arg
 35 40 45

Tyr Pro Gln Gly Pro Ala Ala Gly Gly Gly Thr Ser Gln Ser Gly Trp
 50 55 60
 Gly Pro Pro Ser Gly Gln Asn Ile Ile Leu Trp Lys Lys Val Phe Ser
 65 70 75 80
 Asn Ala Phe Leu Arg Gln Asp Leu Val Leu Ser Pro Arg Val Gly Ser
 85 90 95
 Ala Val Val Gln Leu Arg Gly Asn Ser Met Leu Ala Val Leu Thr Ala
 100 105 110
 Leu Ala Arg Ser Arg Arg Leu Leu Cys Leu Gly Ser Tyr Phe Gly Gly
 115 120 125
 Thr

<210> 3949

<211> 122

<212> PRT

<213> Homo sapiens

<400> 3949

Met Ala Glu Gly His Gly Phe Leu Lys Asp His Cys Gly Cys Cys Val
 1 5 10 15
 Asn Arg Gly Thr Ser Asp Glu Gln Asn Gln Ala Leu Asn Cys Glu Met
 20 25 30
 Thr Ala Glu Met Cys Lys Arg Ala Arg Trp Cys Leu Asp Leu Leu Val
 35 40 45
 Ala Ala Glu Ser Val Arg Asn Gly Trp Arg Pro Val Cys Val Gln Met
 50 55 60
 Glu Pro Asn Glu Leu Pro Trp Glu Gly Trp Val Gly Cys Ser Arg Val
 65 70 75 80
 Gly Arg Glu Glu Leu Gly Asn Leu Glu Asp Ser Ser Leu Ser Asn Trp
 85 90 95
 Ala Glu Gly Asp Val Ile Phe Leu Lys Thr Arg Glu Lys Trp Ala Trp
 100 105 110
 Glu Gly Lys Phe Asp Leu Arg His Ala Asn
 115 120

<210> 3950

<211> 257

<212> PRT

<213> Homo sapiens

<400> 3950

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Met His Ala Lys Ile Trp Leu Met Lys Thr Ser Leu Arg Ser Gly Arg
 1             5             10             15
Ala Ala Leu Arg Glu Leu Arg Ser Arg Glu Asn Phe Leu Ser Lys Leu
      20             25             30
Asn Arg Glu Leu Ile Glu Thr Ile Gln Glu Met Glu Asn Ser Thr Thr
      35             40             45
Leu His Val Arg Ala Leu Leu Gln Gln Gln Asp Thr Leu Ala Thr Ile
      50             55             60
Ile Asp Ile Leu Glu Tyr Ser Asn Lys Lys Arg Leu Gln Gln Leu Lys
      65             70             75             80
Ser Glu Leu Gln Glu Trp Glu Glu Lys Lys Lys Cys Lys Met Ser Tyr
      85             90             95
Leu Glu Gln Gln Ala Glu Gln Leu Asn Ala Lys Ile Glu Lys Thr Gln
      100            105            110
Glu Glu Val Asn Phe Leu Ser Thr Tyr Met Asp His Glu Tyr Ser Ile
      115            120            125
Lys Ser Val Gln Ile Ser Thr Leu Met Arg Gln Leu Gln Gln Val Lys
      130            135            140
Asp Ser Gln Gln Asp Glu Leu Asp Asp Leu Gly Glu Met Arg Arg Lys
      145            150            155            160
Val Leu Glu Ser Leu Ser Asp Lys Ile Gln Lys Lys Lys Lys Lys Ile
      165            170            175
Leu Ser Ser Val Val Ala Val Ser Ser Gln Leu Leu Cys Gly Ser Gly
      180            185            190
Asp Pro Gly Leu Thr Pro Thr Pro Pro Ser Ser Pro Ser Ser Ala Ser
      195            200            205
Arg Pro Thr Ala Ala Pro Ser Val Ser Thr Met Phe Cys Cys Pro Gly
      210            215            220

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Arg Gly Thr Trp Gly Pro Asp Leu Phe Phe Leu His Arg Lys Pro Ser
 225 230 235 240
 Val Pro Met Lys Arg Leu Ser Tyr Arg Arg Cys Gly Glu Ala Arg Thr
 245 250 255
 Ser

<210> 3951

<211> 143

<212> PRT

<213> Homo sapiens

<400> 3951

Met Thr Ser Ala Lys Thr Leu Arg Gly Arg His Ser Ser Thr Lys Thr

1	5	10	15
Leu Phe Pro Ser Glu Val Pro Phe Thr Gly Thr Gly Val Arg Thr Ser			
20	25	30	
Pro Cys Leu Leu Gly Ala Ile Pro Phe Asn Leu Gln Gln Pro Leu Val			
35	40	45	
Ser Val His Asn Ala Asn Glu Val Arg Val Ala Ser Pro Gln Ala Asn			
50	55	60	
Asn Phe Pro Gln Ile Ala Ala Arg Cys Gly Pro Ala Lys Ser Gln Gly			
65	70	75	80
Ala Ala Ile Ser Lys Gln Ser Pro Pro Val Leu Glu Gly Val Cys Arg			
85	90	95	
Asp Ala Ser Gly Glu Arg Pro Gly Pro Gly Ala Gly Leu Gln Leu Trp			
100	105	110	
Asp Lys Leu Leu Ser Gly Pro Gly Ala Thr Gln Arg Arg Gln Ala Ala			
115	120	125	
Val Gln Val Lys Pro Ile Gln His Leu Ala Pro Cys Leu Gln Ala			
130	135	140	

<210> 3952

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3952

Met Ser His Cys Pro Arg Ala Cys Lys Leu Phe Phe Asn Phe Ser Ser
 1 5 10 15
 Trp Thr Ser Leu Cys Cys Gly Ser Pro Ser Val Ser Leu Ala Ser His
 20 25 30
 Ser Gln Thr Gly Lys Ala Arg Ser Phe Ser Ser Leu Ala Phe Ser Ser
 35 40 45
 Ser Ile Ser Phe Leu Leu Gly His Ser Ser Val Leu Ile Tyr Ser Gly
 50 55 60
 Phe Phe Leu Phe Lys Asn Leu Phe His Ser Tyr Val Ser Cys Gly Leu
 65 70 75 80
 Asp Glu Ile Leu His Asp Phe Ile Gln Ser His Gly Thr Arg Leu Leu
 85 90 95
 Glu Ser Ser Glu Ile Cys Leu Phe Ile Asn Pro Leu Gln Trp Asp Ser
 100 105 110
 His

<210> 3953

<211> 166

<212> PRT

<213> Homo sapiens

<400> 3953

Met Glu Gly Thr Tyr Ile Thr Ser Glu His Ser Tyr Gln Lys Pro Gln
 1 5 10 15
 Ser Phe Gly Gln Asp Cys Lys Ser Leu Ala Asp Pro Gly Ser Ser Asp
 20 25 30
 Asp Asp Asp Val Ser Ser Leu Glu Glu Gln Glu Phe His Met Arg
 35 40 45
 Ser Lys Asn Ser Leu Gln Tyr Ser Ala Lys Glu His Gly Met Pro Glu

50 55 60
 Lys Asn Pro Ala Glu Gly Asn Thr Val Phe Val Tyr Asn Asp Lys Lys
 65 70 75 80
 Gly Thr Glu Asp Pro Gly Asp Ser His Leu Gln Trp Gln Leu Asn Leu
 85 90 95
 Leu Thr His Ile Glu Asn Val Gln Asn Glu Val Thr Ser Arg Met Asp
 100 105 110
 Leu Ile Glu Lys Glu Val Asp Val Leu Glu Ser Trp Leu Asp Phe Thr
 115 120 125
 Gly Glu Leu Glu Pro Pro Asp Pro Leu Ala Arg Leu Pro Gln Leu Lys
 130 135 140
 Arg His Ile Lys Gln Leu Leu Ile Asp Met Gly Lys Val Gln Gln Ile
 145 150 155 160
 Ala Thr Leu Cys Ser Val
 165

<210> 3954

<211> 117

<212> PRT

<213> Homo sapiens

<400> 3954

Met Lys Lys Val Lys Lys Lys Arg Ser Glu Ala Arg Arg His Arg Asp
 1 5 10 15
 Ser Thr Ser Gln His Ala Ser Ser Asn Ser Thr Ser Gln Gln Pro Ser
 20 25 30
 Pro Glu Ser Thr Pro Gln Gln Pro Ser Pro Glu Ser Thr Pro Gln His
 35 40 45
 Ser Ser Leu Glu Thr Thr Ser Arg Gln Pro Ala Phe Gln Ala Leu Pro
 50 55 60
 Ala Pro Glu Ile Arg Arg Ser Ser Cys Cys Leu Leu Ser Pro Asp Ala
 65 70 75 80
 Asn Val Lys Ala Ala Pro Gln Ser Arg Lys Ala Gly Gly Leu Ser Ser
 85 90 95
 Ser Phe Ser Ser Ser Ser Leu Pro Ala Asp Gly Val Leu Gly His Pro

100 105 110
 Lys Gly Trp Phe Leu
 115

<210> 3955

<211> 189

<212> PRT

<213> Homo sapiens

<400> 3955

Met Phe Gly Ser Ser Arg Gly Gly Val Arg Gly Gly Gln Asp Gln Phe
 1 5 10 15
 Asn Trp Glu Asp Val Lys Thr Asp Lys Gln Arg Glu Asn Tyr Leu Gly
 20 25 30
 Asn Ser Leu Met Ala Pro Val Gly Arg Trp Gln Lys Gly Arg Asp Leu
 35 40 45
 Thr Trp Tyr Ala Lys Gly Arg Ala Pro Cys Ala Gly Pro Ser Arg Glu
 50 55 60
 Glu Glu Leu Ala Ala Val Arg Glu Ala Glu Arg Glu Ala Leu Leu Ala
 65 70 75 80
 Ala Leu Gly Tyr Lys Asn Val Lys Lys Gln Pro Thr Gly Leu Ser Lys
 85 90 95
 Glu Asp Phe Ala Glu Val Cys Lys Arg Glu Gly Gly Asp Pro Glu Glu
 100 105 110
 Lys Gly Val Asp Arg Leu Leu Gly Leu Gly Ser Ala Ser Gly Ser Val
 115 120 125
 Gly Arg Val Ala Met Ser Arg Glu Asp Lys Glu Ala Ala Lys Leu Gly
 130 135 140
 Leu Ser Val Phe Thr His His Arg Val Glu Ser Gly Gly Pro Gly Thr
 145 150 155 160
 Ser Ala Ala Ser Ala Arg Arg Lys Pro Arg Ala Glu Asp Gln Thr Glu
 165 170 175
 Ser Arg Gly Val Ser Arg Val Thr Leu Glu Glu Arg Ser
 180 185

<210> 3956

<211> 968

<212> PRT

<213> Homo sapiens

<400> 3956

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Met Glu Val Thr Gly His Leu Pro Pro Leu Asn Glu Thr Ala Asn Phe
  1             5             10             15
Ile Ser Asn Ser Lys Ile Lys Thr Ser Asp Thr Thr Gln Lys Asn Ser
      20             25             30
Phe Gln Ser His Ile Asn Ser Val Ala Asn Asp Ile Val Glu Ser Val
      35             40             45
Leu Gly Lys Met Tyr Leu Val Val Val Thr Ser Leu Tyr Glu Asn Asn
      50             55             60
Lys Ser Arg Thr Glu Val Glu Ile Ser Asp His Asn Asp Ser Leu Leu
      65             70             75             80
Met Lys Pro Leu Arg Phe Arg Glu Thr Lys Gln Ala Gly Lys Ile Ser
      85             90             95
Asn Ser Pro Arg Tyr Ala Ile Ser Gln Ala Tyr Ser Tyr Val Asp Ser
      100            105            110
Gln Asn Ile Ser Val Met Glu Asn Thr Leu Leu Pro Tyr Leu Pro Leu
      115            120            125
Gln Val Lys Lys Asp Leu Ile Gln Met Val Leu Asn Lys Ile Thr Asn
      130            135            140
Phe Val Ser Leu Pro Leu Lys Val Ser Pro Lys Asp Asn Pro Lys Pro
      145            150            155            160
Cys Phe Lys Ala His Leu Lys Thr Arg Ser Lys Ile Thr Thr Leu Pro
      165            170            175
Lys Phe Thr Lys Lys Thr His Leu Gly Leu Ser Ala Ala Lys Ala Lys
      180            185            190
Ser Lys Thr Lys Leu Gly Pro Gly Glu Lys Thr Leu Lys Asp Ser Arg
      195            200            205
Ser Lys Thr Ala Ile Gly Leu Ser His Ile Met Ser Ala Gly Asp Ala
      210            215            220
Lys Asn Leu Leu Asp Thr Lys Leu Pro Thr Ser Glu Leu Lys Ile Tyr

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225 230 235 240
 Ala Lys Asp Ile Ile Ile Asn Ile Leu Glu Thr Ile Val Lys Glu Phe
 245 250 255
 Gly Lys Val Lys Gln Thr Lys Ala Leu Pro Ser Asp Gln Ile Ile Ala
 260 265 270
 Ala Gly Lys Ile Val Asn Thr Val Leu Gln Glu Leu Tyr Val Thr Asn
 275 280 285
 Asn Cys Asn Leu Ala Tyr Pro Met Lys Ser Ser His Leu Arg Leu Ser
 290 295 300
 Gln Gly Asn Ile Gly Ile Gly Ser Leu Pro Lys Gln Gln Ala Cys Phe
 305 310 315 320
 Tyr Leu Glu Asn Val Ser Ser Gln Leu Glu His Ile Phe Pro Arg Glu
 325 330 335
 Gly Ile Phe Lys Lys Leu Phe Asp Lys Trp Gln Thr Glu Ser Asn Asp
 340 345 350
 Lys Glu Asn Glu Lys Cys Lys Leu Leu Met Ile Ala Glu Asn Val Leu
 355 360 365
 Thr Glu Ile Ser Ile Lys Ala Lys Glu Leu Glu Tyr Ser Leu Ser Leu
 370 375 380
 Leu Asn Leu Pro Pro Leu Glu Asn Cys Glu Ser Arg Leu Tyr Asn His
 385 390 395 400
 Phe Glu Gly Ala Ser Thr Arg Ala Glu Asp Thr Lys Ala Gln Ile Asn
 405 410 415
 Met Phe Gly Arg Glu Ile Val Glu Met Leu Leu Glu Lys Leu Gln Leu
 420 425 430
 Cys Phe Leu Ser Gln Ile Pro Thr Pro Asp Ser Glu Glu Thr Leu Ser
 435 440 445
 Asn Ser Lys Glu His Ile Thr Ala Lys Ser Lys Tyr Gly Phe Pro Asn
 450 455 460
 Lys His Ser Leu Ser Ser Leu Pro Ile Tyr Asn Thr Lys Thr Lys Asp
 465 470 475 480
 Gln Ile Ser Val Gly Ser Ser Asn Gln Ile Val Gln Glu Ile Val Glu
 485 490 495
 Thr Val Leu Asn Met Leu Glu Ser Phe Val Asp Leu Gln Phe Lys His
 500 505 510
 Ile Ser Lys Tyr Glu Phe Ser Glu Ile Val Lys Met Pro Ile Glu Asn

515	520	525
Leu Ser Ser Ile Gln Gln Lys	Leu Leu Asn Lys Lys Met	Leu Pro Lys
530	535	540
Leu Gln Pro Leu Lys Met Phe Ser Asp Lys Ser Glu Ser Asn Thr Ile		
545	550	555
Asn Phe Lys Glu Asn Ile Gln Asn Ile Leu Leu Arg Val His Ser Phe		
565	570	575
His Ser Gln Leu Leu Thr Tyr Ala Val Asn Ile Ile Ser Asp Met Leu		
580	585	590
Ala Val Ile Lys Asn Lys Leu Asp Asn Glu Ile Ser Gln Met Glu Pro		
595	600	605
Ser Ser Ile Ser Ile Leu Lys Glu Asn Ile Val Ala Ser Glu Ile Ile		
610	615	620
Gly Thr Leu Met Asp Gln Cys Thr Tyr Phe Asn Glu Ser Leu Ile Gln		
625	630	635
Asn Leu Ser Arg Glu Ser Leu Phe Gln Gly Ala Glu Asn Ala Tyr Thr		
645	650	655
Val Asn Gln Val Glu Leu Ala Thr Asn Met Lys Met Phe Thr Ser Lys		
660	665	670
Leu Lys Glu Gly Ser Leu Gly Ile Asn Pro Ser Gln Val Ser Lys Thr		
675	680	685
Gly Phe Val Phe Cys Ser Asp Glu Asp Met Lys Glu Lys Tyr Arg Val		
690	695	700
Ser Ser Asp Leu Pro Thr Ser Val Arg Ser Ser Val Glu Asp Thr Val		
705	710	715
Lys Asn Ser Glu Pro Thr Lys Arg Pro Asp Ser Glu Thr Met Pro Ser		
725	730	735
Cys Ser Thr Arg Asn Lys Val Gln Asp His Arg Pro Arg Glu Ser Asn		
740	745	750
Phe Gly Ser Phe Asp Gln Thr Met Lys Gly Asn Ser Tyr Leu Pro Glu		
755	760	765
Gly Ser Phe Leu Gln Lys Leu Leu Arg Lys Ala Ser Asp Ser Thr Glu		
770	775	780
Ala Ala Leu Lys Gln Val Leu Ser Phe Ile Glu Met Gly Lys Gly Glu		
785	790	795
Asn Leu Arg Val Phe His Tyr Glu Asn Leu Lys Pro Val Val Glu Pro		

	805		810		815										
Asn	Gln	Ile	Gln	Thr	Thr	Ile	Ser	Pro	Leu	Lys	Ile	Cys	Leu	Ala	Ala
	820		825		830										
Glu	Asn	Ile	Val	Asn	Thr	Val	Leu	Ser	Ser	Cys	Gly	Phe	Pro	Ser	Gln
	835		840		845										
Pro	His	Thr	Asn	Glu	Asn	Arg	Glu	Ile	Met	Lys	Pro	Phe	Phe	Ile	Ser
	850		855		860										
Lys	Gln	Ser	Ser	Leu	Ser	Glu	Val	Ser	Gly	Gly	Gln	Lys	Asp	Asn	Glu
865			870		875									880	
Lys	Ser	Leu	Leu	Arg	Met	Gln	Asp	Lys	Lys	Ile	Asn	Tyr	Ile	Pro	Glu
	885		890		895										
Glu	Glu	Asn	Glu	Asn	Leu	Glu	Ala	Ser	Arg	Glu	Asp	Ser	Ser	Phe	Leu
	900		905		910										
Gln	Lys	Leu	Lys	Lys	Lys	Glu	Tyr	Pro	Lys	Ile	Glu	Thr	Val	Lys	Glu
	915		920		925										
Val	Glu	Ala	Phe	Thr	Phe	Ala	Asp	His	Glu	Met	Gly	Ser	Asn	Glu	Val
	930		935		940										
His	Leu	Ile	Ala	Arg	His	Val	Thr	Thr	Ser	Val	Val	Thr	Tyr	Leu	Lys
945			950		955									960	
Asn	Phe	Glu	Thr	Thr	Gly	Arg	Cys								
	965														

<210> 3957

<211> 180

<212> PRT

<213> Homo sapiens

<400> 3957

Met	Ala	Ser	Leu	Ser	Gly	Pro	Pro	Cys	Ala	Ser	Thr	Leu	Gln	Pro	Met
1			5				10					15			
Ser	Ala	Thr	His	Ser	Arg	Gly	Pro	Trp	Thr	Trp	Pro	Pro	Ala	Gly	Ala
	20				25				30						
Val	Leu	Ser	Asp	Pro	Ser	Phe	Ser	Leu	Ser	Pro	Phe	Ser	Ala	Ala	Ser
	35				40				45						
Ser	Ser	Pro	Gly	Ser	Ile	Leu	Ser	Leu	Asn	Ser	Met	Thr	Gln	Leu	Pro

50 55 60
 Pro Leu Ser Pro Lys Ser Arg Leu Leu Leu Trp Pro Phe Pro Leu Ser
 65 70 75 80
 Leu Lys Pro Ala Ser Val Trp Thr Gln Leu Leu Pro Ser Pro His Ser
 85 90 95
 Arg Arg Gly Cys Ser Ala Leu Leu Glu Arg Pro Pro Pro Leu Asn Ser
 100 105 110
 Ala His Gln Thr Ser Thr Ile Gln Pro Leu Arg Gly Pro Gln Ser Tyr
 115 120 125
 Leu Ala Ile Gly Leu Leu Ala Pro Asn His Leu Pro Leu Pro Ser Ser
 130 135 140
 Ser Ser Ser Ser Leu His His Phe Leu Ile Thr Ser Asp Leu Ser Ser
 145 150 155 160
 Ser Ala Glu Asp Leu Ser Pro Ser Val Tyr Thr Glu Trp Pro Leu Ala
 165 170 175
 Glu Asn Pro Pro
 180

<210> 3958

<211> 161

<212> PRT

<213> Homo sapiens

<400> 3958

Met Glu Val Thr Leu Leu Val Lys Gly Glu Pro Pro Pro Cys His His
 1 5 10 15
 Asp Ser Ser Gly Pro Gly His Cys Pro Gln Phe Gln Gly Lys Lys Gln
 20 25 30
 Met Ser Gly Ala Arg Ala Arg Ala Gln His Gln Ala His Ser Ser Gln
 35 40 45
 Glu Ser Thr Gln Cys Gln Val Ser Pro Cys Pro Ala Trp His Pro Arg
 50 55 60
 Ala Gly Cys Ser Ser His Gly Thr Asp Gly Asn Ala Lys Ala His Arg
 65 70 75 80
 Glu Ala Leu Ala Pro His Cys Pro Val Pro Pro Pro Pro His Ala Pro

	85	90	95
Glu Arg Pro Gly Pro Cys Leu Gln Ala Pro Ala Ser Ala Pro Arg Arg			
100	105	110	
Glu Ala Cys Pro Ala Thr Leu Val Leu Lys Ser His Pro Trp Leu Pro			
115	120	125	
Val Pro Gly Lys Gln Val Gly Ser Thr Lys Pro Arg Val Pro Ala Thr			
130	135	140	
Leu Cys Thr Asp Ala Asp Phe Leu Cys Thr Leu Gly Cys Leu Leu Pro			
145	150	155	160
His			

<210> 3959

<211> 136

<212> PRT

<213> Homo sapiens

<400> 3959

Met Pro Ser Ser Ile Asp Ile Ile Asp Gly Thr Lys Glu Lys Lys Thr			
1	5	10	15
Lys Leu Asp Gly Gly Ser Ala Ser Leu Leu Arg Leu Gln Glu Glu Leu			
20	25	30	
Ser Leu Pro Gln Thr Glu Val Leu Glu Phe Gly Val Pro Leu Leu Arg			
35	40	45	
Ala Ala Ala Trp Glu Leu Trp Pro Lys Glu Gln Gln Ile Ala Leu His			
50	55	60	
Leu Glu Cys Ala Cys Phe Leu Gln Val Leu Ala Cys Arg Cys Gly Ser			
65	70	75	80
Cys His Gly Gly Asp Phe Val Pro Phe His His Phe Ala Val Cys Ser			
85	90	95	
Thr Lys Asn Ser Lys Gly Thr Ser Arg Phe Cys Thr Tyr Arg Asp Thr			
100	105	110	
Gly Ser Val Leu Thr Gln Val Ile Thr Glu Lys Leu Gln Leu Pro Ser			
115	120	125	
Pro Gln Glu Gln Arg Lys Ser Ser			

130

135

<210> 3960

<211> 193

<212> PRT

<213> Homo sapiens

<400> 3960

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Met Thr Asn Ser Thr Val Pro Asp Val Leu Cys Ile Gly Pro Pro Glu
  1              5              10              15
Tyr Gln Glu Lys Lys Leu Asn Asp Val Thr Ser Phe Asp Tyr Glu Cys
      20              25              30
Thr Thr Thr Asp Phe Val Val His Gln Thr Leu Pro Tyr Gln Ser Val
      35              40              45
Ser Val Asp Thr Phe Asn Ser Lys Asn Asp Val Tyr Val Ala Ile Ala
      50              55              60
Gln Pro Ser Met Glu Asn Cys Met Val Leu Glu Trp Asp His Ile Glu
      65              70              75              80
Met Asn Phe Arg Ser Tyr Asp Asn Ile Thr Gly Gln Ser Ile Val Gly
      85              90              95
Cys Lys Ala Ile Leu Ile Asp Asp Gln Val Phe Val Val Val Ala Gln
      100             105             110
Leu Phe Gly Gly Ser His Ile Tyr Lys Tyr Asp Glu Ser Trp Thr Lys
      115             120             125
Phe Val Lys Phe Gln Asp Ile Glu Val Ser Arg Ile Ser Lys Pro Asn
      130             135             140
Asp Ile Glu Leu Phe Gln Ile Asp Asp Glu Thr Phe Phe Val Ile Ala
      145             150             155             160
Asp Ser Ser Lys Ala Gly Leu Ser Thr Val Tyr Lys Trp Asn Ser Lys
      165             170             175
Gly Phe Tyr Ser Tyr Gln Pro Leu Pro Gly Pro His His Pro Pro Val
      180             185             190
Glu

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<210> 3961

<211> 267

<212> PRT

<213> Homo sapiens

<400> 3961

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Met Val Arg Gly Ala Gly Pro Gly Pro Ser Leu Ser Ala Leu Ser His
  1             5             10             15
Pro Thr Gly Ala Ser Gly Met Ala Ala Ala Glu Gly Pro Gly Tyr Leu
      20             25             30
Val Ser Pro Gln Ala Glu Lys His Arg Arg Ala Arg Asn Trp Thr Asp
      35             40             45
Ala Glu Met Arg Gly Leu Met Leu Val Trp Glu Glu Phe Phe Asp Gly
      50             55             60
Leu Lys Gln Thr Lys Arg Asn Ala Lys Val Tyr Glu Lys Met Ala Ser
      65             70             75             80
Lys Leu Phe Glu Met Thr Gly Glu Arg Arg Leu Gly Glu Glu Ile Lys
      85             90             95
Ile Lys Ile Thr Asn Met Thr Phe Gln Tyr Arg Lys Leu Lys Cys Met

      100             105             110
Thr Asp Ser Glu Ser Ala Pro Pro Asp Trp Pro Tyr Tyr Leu Ala Ile
      115             120             125
Asp Gly Ile Leu Ala Lys Val Pro Glu Ser Cys Asp Gly Lys Leu Pro
      130             135             140
Asp Ser Gln Pro Pro Gly Pro Ser Thr Ser Gln Thr Glu Ala Ser Leu
      145             150             155             160
Ser Pro Pro Ala Lys Ser Thr Pro Leu Tyr Phe Pro Tyr Asn Gln Cys
      165             170             175
Ser Tyr Glu Gly Arg Phe Glu Asp Asp Arg Ser Asp Ser Ser Ser
      180             185             190
Leu Leu Ser Leu Lys Phe Arg Ser Glu Glu Arg Pro Val Lys Lys Arg
      195             200             205
Lys Val Gln Ser Cys His Leu Gln Lys Lys Gln Leu Arg Leu Leu Glu
      210             215             220

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Ala Met Val Glu Glu Gln Arg Arg Leu Ser Arg Ala Val Glu Glu Thr
 225 230 235 240
 Cys Arg Glu Ile Ser Arg Cys Tyr Ser Thr Val Cys Arg Arg Gly Cys
 245 250 255
 Pro Val Ala Met Glu Trp Leu Trp Thr Leu Ser
 260 265

<210> 3962

<211> 238

<212> PRT

<213> Homo sapiens

<400> 3962

Met Pro Gly Arg Thr Gly Leu Ala Gly Glu Met Pro Val Gly Trp Gly
 1 5 10 15
 Pro Gly Arg Ala Gly Ala Ser Glu Pro Asn Glu Ser Thr Cys Ala Pro
 20 25 30
 Glu Ala Leu Asp Gly His Leu Gly Val Ala Arg Arg Glu Gly Pro Ile
 35 40 45
 Leu Gly Thr Leu Leu Gly Arg Gly Lys Gly His Cys Gln Ala Leu Ser
 50 55 60
 Gln Leu Gly His Cys Pro Ser Pro Ala Trp Asn Asn Tyr Ser Gly Met
 65 70 75 80
 Met Asp Ile Gly Val Ala Pro Ser Arg Val Gly Pro Ser Gly His Cys
 85 90 95
 Gly Val Leu Arg Ser His Ser Arg Pro Gly Glu Leu Ala Val Val Met
 100 105 110
 Asn His Lys Val Pro Arg His Arg Pro Val Ser Ser Val Gly Thr Glu
 115 120 125
 Leu Leu Trp Val Arg Cys Ala Pro Lys Met Val Gln Leu Pro Ile Cys
 130 135 140
 Cys Leu Leu Leu Thr Pro Ala Pro Gly Ile Gly Pro Arg Ala His Gly
 145 150 155 160
 His Leu His Thr Asn Leu Glu Thr Arg Gly Leu Pro Arg Gly Thr Arg

165 170 175
 Glu Ser Gln Gln Ala Glu Gly Glu Gly Glu Ala Ile Gln Glu Gly Arg
 180 185 190
 Gly Ala Cys Lys Arg Ala Gln Arg Lys Glu Gly Glu Gly Pro Arg Gly
 195 200 205
 Pro Cys Val Val Arg Ala Gly Gly Val Gly Trp Gly Thr Arg Gln Val
 210 215 220
 Ala Gly Glu Pro Pro Leu Val Asp Cys Ser Thr Ala Gly Thr
 225 230 235

<210> 3963

<211> 151

<212> PRT

<213> Homo sapiens

<400> 3963

Met Arg Met Ala Pro Thr Glu Ser Thr Glu Gly Arg Arg Leu Trp Pro
 1 5 10 15
 Gly Pro Arg Glu Gly Gly Ser Gly Lys Glu Thr Thr Ser Glu Lys Leu
 20 25 30
 Ser Asn Leu Pro Arg Pro His Ser Tyr Ser Pro Lys Arg Ala Asp Ala
 35 40 45
 Glu Ser Phe Arg Gly Val Pro Ala Ala Phe Lys Lys Cys Arg Glu Val
 50 55 60
 Phe Arg Ala Cys Trp Gly Ser Arg Glu Leu Leu Phe Leu Phe Lys Ala
 65 70 75 80
 Ile Ser Glu Ala Gly Pro Ala Gln Asn Ser Cys Gly Ile Thr Leu Glu
 85 90 95
 Lys Ala Gly Gly Leu Glu Asp Thr Gly Ser His Trp Leu Ser Trp Ala
 100 105 110
 Arg Cys Lys Val Leu Tyr Ile Asn Gly Phe Thr Asp Pro Trp Lys Asp
 115 120 125
 Ala Gln Ala Trp Ile Leu Ile Val Ser Cys Lys Lys Gly Lys Gly Thr
 130 135 140
 Pro Glu Arg Glu Gly Arg Asn

145

150

<210> 3964

<211> 119

<212> PRT

<213> Homo sapiens

<400> 3964

Met Pro Trp Gly Gly Val Gly Ala Gln Pro Pro Leu Phe Tyr Leu Leu
 1 5 10 15
 Gly Lys Gly Leu Gln Trp Gly Leu Glu Tyr Arg Gly Phe His Gly Ser
 20 25 30
 Pro Gly Asp Pro Glu His Phe Tyr Ser Phe Tyr Gln Asp Lys Glu Gly
 35 40 45
 Leu Cys Ile Arg Leu Ser Thr Leu Asn Trp Phe Leu Trp Cys Phe Ile
 50 55 60
 Asp Glu Ile Arg Met His Arg Arg Pro Gln Ala Arg Tyr Leu Leu Ser
 65 70 75 80
 Pro Gln Cys Ser Ala Pro Pro Ala Gln Gly Ser Gly Phe Pro Arg Arg
 85 90 95
 Thr Gln Leu Thr Pro Thr Pro Gln Glu Ala Gln Ala Gly Leu Cys Arg
 100 105 110
 Ala His Lys Pro Gly Pro Val
 115

<210> 3965

<211> 101

<212> PRT

<213> Homo sapiens

<400> 3965

Met Arg Phe Pro Ser Pro Gly Pro Val Lys Asn Val Asp Gly Asp Trp
 1 5 10 15
 Thr Thr Val Lys Met Gln Val Tyr Gln Asp Ala Pro Ser Thr Thr Leu

20 25 30
 Cys Ala Gly Pro Gly Pro Thr Tyr Leu Gln Pro Leu Ala Val Leu Arg
 35 40 45
 Gly Arg Cys His Pro Ser Cys Leu Gln Arg Ser Arg His Ser Gln Leu
 50 55 60
 Arg Arg Thr Val Ala Glu Gln Ile Leu His Leu Phe Thr Gly Val Leu
 65 70 75 80
 His Arg Asn Ala Ile Phe Leu Leu Val Ser Val Ala Ser His Ser Glu
 85 90 95
 Val Arg Arg Gly Asp
 100

<210> 3966

<211> 1197

<212> PRT

<213> Homo sapiens

<400> 3966

Met Ser Asp Glu Asn Met Ser Lys Thr Gln Thr Val Tyr Asp Ser Asp
 1 5 10 15
 Ser Gln Ser Gly Ser Ser Ala Lys Glu Lys Asp Arg Gly Ala Asn Leu
 20 25 30
 Cys Val Met Asp His Phe Met Lys Ile Phe Leu Tyr Cys Arg Arg Ala
 35 40 45
 Met Val Leu Ala His Arg Gly Gly Tyr Trp Thr Leu Leu Gln Asn Cys
 50 55 60
 Cys Arg Ala Leu Trp Asn Phe Thr Gln Glu Leu Gln Ile Leu Leu Lys
 65 70 75 80
 Gln Ala Val Asp Leu Asp Lys Thr Phe Pro Ile Ser Gln Asp Gly Phe
 85 90 95
 Phe Cys Thr Ser Val Leu Pro Phe Tyr Leu Gly Ala Glu Leu Leu Ile
 100 105 110
 Asp Met Leu Ile Gln Leu Gln Asn Thr Ser Ser Ile Lys Pro Ile Glu
 115 120 125
 Asp Lys Gly Glu Phe Ser Val Pro Ser Cys Tyr Gly Asn Ile Lys Asn

130	135	140
Asp Asn Gly Gly Ser Ser Leu Thr Phe Glu His Pro Leu Asp Asp Val		
145	150	155
Asn Val Val Asp Leu Lys Trp Ile His Asp Phe Val Leu Lys Ser Leu		
165	170	175
Glu Val Leu Tyr Gln Val Glu Lys Trp Glu Thr Leu Val Ser Leu Ala		
180	185	190
Ile Gln Phe Asn Thr Val Ser His Glu Arg Tyr Thr Glu Gln Val Thr		
195	200	205
Pro Leu Leu Val Tyr Ala Gln Arg Gln Leu Leu Leu Arg Ile Gln Lys		
210	215	220
Phe Lys Gly Pro Asp Ile Thr Gln Gln Pro Cys Ala Arg Tyr Glu Ala		
225	230	235
Glu Tyr Gly Glu Lys Ile Thr Cys Arg Asn Phe Ile Gly Lys Gln Leu		
245	250	255
Lys Ile Asn Ser Ser Thr Ile Glu Ala Thr Ser Asn Cys Thr Asp Leu		
260	265	270
Leu Lys Met Leu Ile Ser Ser Glu Tyr Ser Arg Ala Lys Ala Leu Val		
275	280	285
Cys Val Pro Val Asp Val Thr Asp Thr Leu Arg Cys Phe Arg Glu Thr		
290	295	300
Leu Glu Lys Ser Lys Tyr His Asn Arg Ser Ile Arg His Ser Arg Lys		
305	310	315
Leu Leu Ser Leu Phe Leu Ala Gln Thr Gln Asp Val Leu Gln Ala Ser		
325	330	335
Asn Gln Arg Ser Leu Lys Val Gln Ala Leu His Ser Leu Gly Ser Leu		
340	345	350
Leu Ile Phe Ala Glu Lys Lys Arg Ala Ala Phe Lys Cys Trp Cys Gln		
355	360	365
Ala Leu Asp Asp Ile Phe Arg Lys Pro Asp Val Leu His Thr Trp Lys		
370	375	380
Glu Phe Gly Pro Ser Leu Thr Asn Val Thr Asn Ser His Ser Pro Pro		
385	390	395
Gly Phe Lys Asp Tyr Ser Glu Glu Phe Leu Ser Arg Val Gly Ile Trp		
405	410	415
Gly Cys Leu Gln Gly Ala Val Ile Ser Ala Lys Ile Ala Gln Phe Ile		

420	425	430
Lys Ser Leu Asn Val Glu Lys Lys Thr Asp Cys Cys Ile Leu Ser Ala		
435	440	445
Leu Leu Phe Gln Gly Leu Leu Arg Thr Thr Leu Pro His Pro Lys Ala		
450	455	460
Glu Arg Cys Tyr Ala Gln Tyr Glu Ile Thr Gln Leu Leu Pro Gly Ile		
465	470	475
Glu Leu Phe Ser Asp Arg Tyr Arg Ala Asp Ile Cys Ser Val Ile Ala		
485	490	495
Ser Leu Tyr Tyr Ile Ile Arg Glu Leu His Phe Val Arg Gln Asn Leu		
500	505	510
Ile Val Leu Pro Leu Leu Ala Leu Tyr Gln Tyr Phe Val Ser Gly Ile		
515	520	525
Cys Gln Asp Ile Thr Arg Asn Leu Glu Ala Arg Ile Leu Lys Ile Glu		
530	535	540
Val Leu Ile Asp Leu Arg Phe Phe Ser Glu Ala Phe Tyr Glu Ile Ser		
545	550	555
Gln Ile Phe Tyr Gly Lys Asn Met Pro Cys Pro Ile Pro Ala Gly Tyr		
565	570	575
Lys Ala Thr Gly Lys Met Lys Ile Phe Gln Ser Phe Asp Ser Gly Lys		
580	585	590
Pro Leu Thr Ser Lys Glu Asn Ile Gln Ala Ile Asp Glu Leu Arg Asn		
595	600	605
Lys Gly Leu Pro Ala Val Leu Val Thr Ile Gly Gln Pro His Leu Leu		
610	615	620
Asn Lys Phe Asn Phe Val Lys Ala Tyr Phe Phe Leu Ser Val Ala Ala		
625	630	635
Thr Ile Asn Cys Val Pro Glu Asn Lys Phe Lys Thr Val Ile Thr Asn		
645	650	655
Lys Ser Lys Pro Asn Leu Pro Asn Leu Lys Glu Ile Tyr Ser Lys Asp		
660	665	670
Asp Gly Ser Ser Phe Tyr Asn Leu Thr Lys Leu Lys Asp Glu Ile Thr		
675	680	685
Leu Ser Met Leu Lys Ser Met Leu Leu Met Glu Ala Glu Asp Arg Leu		
690	695	700
Asn Phe Leu Leu Ser Glu Val Glu Gln Lys Thr Leu Ser Gln Cys Ser		

705	710	715	720
Ala Gly Glu Leu Glu Ile Val Val Glu Ala Arg Leu Gln Leu Ala Ala			
	725	730	735
Val Ala Leu Gln Arg His Arg Ala Ala Tyr Ser Ala Ala Ile Val Phe			
	740	745	750
Ser Thr Leu Thr Leu Leu Gln Asp Ser Lys Leu Phe Glu Lys Lys Val			
	755	760	765
Val Gln Asp Asp Thr Glu Asn Pro Val Ser Pro Gly Thr Ser Val Thr			
	770	775	780
Glu Asn Lys Asp Asp Asn Glu Phe Leu Asp Pro Ile Ser Leu Asn Ala			
785	790	795	800
Arg Glu Tyr Phe Asn Ile His Leu Trp Leu Arg Cys Arg Leu Ala Leu			
	805	810	815
Val Thr Ala Phe Val Ala Gln Ile His Gly Ile Gly Ile Val Lys Glu			
	820	825	830
Asp Asp Met Thr Asp Cys Leu Ser Leu Ile Asn Glu Val Cys Met Glu			
	835	840	845
Ala Lys Ser Ala Gly Asp Thr Glu Leu Gln Ala Glu Phe Leu Thr Gln			
	850	855	860
Ala Val Ile Leu Gly Leu Gln Glu Lys His Leu Lys Ala Asp Ile Met			
865	870	875	880
Thr Asn Leu Gln Asp Ile Ile His Leu Leu Glu Gly Asn Glu Phe Ile			
	885	890	895
Ser Pro Gln Ser Arg Leu Thr Leu Ala Arg Ser Leu Val Leu Leu Asp			
	900	905	910
Asp Leu Thr Lys Ala Glu Lys Phe Lys Glu Ser Pro Ser Ser Lys Thr			
	915	920	925
Gly Lys Leu Asn Leu Leu Thr Arg Ala His Ser Ile Leu Thr Glu Gln			
	930	935	940
Met Leu Ala Phe Gly Glu Thr Ile Glu Phe Arg Ser Ser Asn Thr Lys			
945	950	955	960
Tyr Ala Asn Pro Leu Gln Pro Leu Lys Asn Ile Tyr Leu Pro His Val			
	965	970	975
Met Leu Leu Ala Lys Ile Lys Met Arg Ile Gly His Thr Val Ala Lys			
	980	985	990
Gln Val Tyr Tyr Lys Asn Lys Arg Lys Asp Pro Ser Lys Trp Leu Pro			

995	1000	1005
Ala Leu His Leu Phe Asp Val	Ala Leu Lys Leu Cys Arg Thr Thr Ala	
1010	1015	1020
Val Glu Glu His Glu Val Glu Ala Glu Ile Leu Phe Gln Lys Gly Lys		
1025	1030	1035
Ile Glu Arg Gln Ile Leu Met Glu Glu Lys Ser Pro Ser Phe Gln Leu		1040
	1045	1050
Glu Ser Leu Tyr Glu Ala Ile Gln Leu Ser Leu Lys Asn Asp Gln Asn		1055
	1060	1065
Ser Gly Leu Ile Arg Asp Ser Tyr Leu Glu Met Ala Leu Leu Tyr Phe		1070
1075	1080	1085
His Leu Lys Lys Pro Lys Ile Lys Ile Ser Gly Ser Pro Leu Thr Leu		
1090	1095	1100
Lys Pro Pro Leu Arg Arg Ser Ser Ser Val Lys Glu Thr Ser Ala Asn		
1105	1110	1115
Lys Phe Glu Met Tyr Ser Ser Leu Ala Trp Ile Ala Ile Arg Ala Ala		1120
	1125	1130
Ala Gln Val Ser Glu Ala Val Leu Ala Ile Asn Leu Leu Ile Gly Lys		1135
	1140	1145
Lys Asn Thr Arg Met His Lys Val Asn Gln Val Ala Leu Pro Asn Ile		1150
1155	1160	1165
Pro Glu Phe Ala Ala Leu Asp Leu Leu Ser Ser Tyr Thr Asp Tyr Leu		
1170	1175	1180
Leu Gly Met Phe Gly Cys Leu His Ile Met Gln Lys Asn		
1185	1190	1195

<210> 3967

<211> 510

<212> PRT

<213> Homo sapiens

<400> 3967

Met Val Gly Met Phe Cys Phe Leu Ile Phe Leu Gln Ser Leu Leu Gly

1

5

10

15

Phe Gly Thr Lys Ala Val Leu Ala Ser Gln Arg Val Gly Lys Cys Cys
20 25 30
Ser Phe Leu Leu Ala Arg Asn Thr Met Ala Gly Thr Arg Arg Val Glu
35 40 45
Gly Gln Val Gly Gly Arg Pro Gly Gly Pro Gly Cys Ser Leu Met Pro
50 55 60
Pro Pro Pro Gln Glu Cys Ala Gly Glu Pro Leu Phe Met Leu Tyr Cys
65 70 75 80
Ala Ile Lys Gln Gln Met Glu Lys Gly Pro Ile Asp Ala Ile Thr Gly
85 90 95
Glu Ala Arg Tyr Ser Leu Ser Glu Asp Lys Leu Ile Arg Gln Gln Ile
100 105 110
Asp Tyr Lys Thr Leu Thr Leu Asn Cys Val Asn Pro Glu Asn Glu Asn
115 120 125
Ala Pro Glu Val Pro Val Lys Gly Leu Asp Cys Asp Thr Val Thr Gln
130 135 140
Ala Lys Glu Lys Leu Leu Asp Ala Ala Tyr Lys Gly Val Pro Tyr Ser
145 150 155 160
Gln Arg Pro Lys Ala Ala Asp Met Asp Leu Glu Trp Arg Gln Gly Arg
165 170 175
Met Ala Arg Ile Ile Leu Gln Asp Glu Asp Val Thr Thr Lys Ile Asp
180 185 190
Asn Asp Trp Lys Arg Leu Asn Thr Leu Ala His Tyr Gln Val Thr Asp
195 200 205
Gly Ser Ser Val Ala Leu Val Pro Lys Gln Thr Ser Ala Tyr Asn Ile
210 215 220
Ser Asn Ser Ser Thr Phe Thr Lys Ser Leu Ser Arg Tyr Glu Ser Met
225 230 235 240
Leu Arg Thr Ala Ser Ser Pro Asp Ser Leu Arg Ser Arg Thr Pro Met
245 250 255
Ile Thr Pro Asp Leu Glu Ser Gly Thr Lys Leu Trp His Leu Val Lys
260 265 270
Asn His Asp His Leu Asp Gln Arg Glu Gly Asp Arg Gly Ser Lys Met
275 280 285
Val Ser Glu Ile Tyr Leu Thr Arg Leu Leu Ala Thr Lys Gly Thr Leu
290 295 300

Gln Lys Phe Val Asp Asp Leu Phe Glu Thr Ile Phe Ser Thr Ala His
 305 310 315 320
 Arg Gly Ser Ala Leu Pro Leu Ala Ile Lys Tyr Met Phe Asp Phe Leu
 325 330 335
 Asp Glu Gln Ala Asp Lys His Gln Ile His Asp Ala Asp Val Arg His
 340 345 350
 Thr Trp Lys Ser Asn Cys Leu Pro Leu Arg Phe Trp Val Asn Val Ile
 355 360 365
 Lys Asn Pro Gln Phe Val Phe Asp Ile His Lys Asn Ser Thr Thr Asp
 370 375 380
 Ala Cys Leu Ser Val Val Ala Gln Thr Phe Met Asp Ser Cys Ser Thr
 385 390 395 400
 Ser Glu His Lys Leu Gly Lys Asp Ser Pro Ser Asn Lys Leu Leu Tyr
 405 410 415
 Ala Lys Asp Ile Pro Asn Tyr Lys Ser Trp Val Glu Arg Tyr Tyr Ala
 420 425 430
 Asp Ile Ala Lys Met Pro Ala Ile Ser Asp Gln Asp Met Ser Ala Tyr
 435 440 445
 Leu Ala Glu Gln Ser Arg Leu His Leu Ser Gln Phe Asn Ser Met Ser
 450 455 460
 Ala Leu His Glu Ile Tyr Ser Tyr Ile Thr Lys Tyr Lys Asp Glu Ile
 465 470 475 480
 Leu Ala Ala Leu Glu Lys Asp Glu Gln Ala Arg Arg Gln Arg Leu Arg
 485 490 495
 Ser Lys Leu Glu Gln Val Val Asp Thr Met Ala Leu Ser Ser
 500 505 510

<210> 3968

<211> 1078

<212> PRT

<213> Homo sapiens

<400> 3968

Met Ser Ser Ser Asp Gly Lys Val Leu Pro Leu Asn Val Gln Val Val
 1 5 10 15

Thr Gln His Met Gln Ser Val Lys Gln Ala Pro Lys Thr Pro Gln Asn
 20 25 30
 Val Pro Ala Ser Pro Gly Gly Asp Arg Ser Ala Arg His Arg Tyr Pro
 35 40 45
 Gln Ile Leu Pro Lys Pro Ala Asn Thr Ser Ala Leu Thr Ile Arg Ser
 50 55 60
 Pro Thr Thr Val Leu Phe Thr Ser Ser Pro Ile Lys Thr Ala Val Val
 65 70 75 80
 Pro Ala Ser His Met Ser Ser Leu Asn Val Val Lys Met Thr Thr Ile
 85 90 95
 Ser Leu Thr Pro Ser Asn Ser Asn Thr Pro Leu Lys His Ser Ala Ser
 100 105 110
 Val Ser Ser Ala Thr Gly Thr Thr Glu Glu Ser Arg Ser Val Pro Gln
 115 120 125
 Ile Lys Asn Gly Ser Val Val Ser Leu Gln Ser Pro Gly Ser Arg Ser
 130 135 140
 Ser Ser Ala Gly Gly Thr Ser Ala Val Glu Val Lys Val Glu Pro Glu
 145 150 155 160
 Thr Ser Ser Asp Glu His Pro Val Gln Cys Gln Glu Asn Ser Asp Glu
 165 170 175
 Ala Lys Ala Pro Gln Thr Pro Ser Ala Leu Leu Gly Gln Lys Ser Asn
 180 185 190
 Thr Asp Gly Ala Leu Gln Lys Pro Ser Asn Glu Gly Val Ile Glu Ile
 195 200 205
 Lys Ala Thr Lys Val Cys Asp Gln Arg Thr Lys Cys Lys Ser Arg Cys
 210 215 220
 Asn Lys Met Leu Pro Gly Thr Ser Thr Gly Asn Asn Gln Ser Thr Ile
 225 230 235 240
 Thr Leu Ser Val Ala Ser Gln Asn Leu Thr Phe Thr Ser Ser Ser Ser
 245 250 255
 Pro Pro Asn Gly Asp Ser Ile Asn Lys Asp Pro Lys Leu Cys Thr Lys
 260 265 270
 Ser Pro Arg Lys Arg Leu Ser Ser Thr Leu Gln Glu Thr Gln Val Pro
 275 280 285
 Pro Val Lys Lys Pro Ile Val Glu Gln Leu Ser Ala Ala Thr Ile Glu
 290 295 300

Gly Gln Lys Gln Gly Ser Val Lys Lys Asp Gln Lys Val Pro His Ser
 305 310 315 320
 Gly Lys Thr Glu Gly Ser Thr Ala Gly Ala Gln Ile Pro Ser Lys Val
 325 330 335
 Ser Val Asn Val Ser Ser His Ile Gly Ala Asn Gln Pro Leu Asn Ser
 340 345 350
 Ser Ala Leu Val Ile Ser Asp Ser Ala Leu Glu Gln Gln Thr Thr Pro
 355 360 365
 Ser Ser Ser Pro Asp Ile Lys Val Lys Leu Glu Gly Ser Val Phe Leu
 370 375 380
 Leu Asp Ser Asp Ser Lys Ser Val Gly Ser Phe Asn Pro Asn Gly Trp
 385 390 395 400
 Gln Gln Ile Thr Lys Asp Ser Glu Phe Ile Ser Ala Ser Cys Glu Gln
 405 410 415
 Gln Gln Asp Ile Ser Val Met Thr Ile Pro Glu His Ser Asp Ile Asn
 420 425 430
 Asp Leu Glu Lys Ser Val Trp Glu Leu Glu Gly Met Pro Gln Asp Thr
 435 440 445
 Tyr Ser Gln Gln Leu His Ser Gln Ile Gln Glu Ser Ser Leu Asn Gln
 450 455 460
 Ile Gln Ala His Ser Ser Asp Gln Leu Pro Leu Gln Ser Glu Leu Lys
 465 470 475 480
 Glu Phe Glu Pro Ser Val Ser Gln Thr Asn Glu Ser Tyr Phe Pro Phe
 485 490 495
 Asp Asp Glu Leu Thr Gln Asp Ser Ile Val Glu Glu Leu Val Leu Met
 500 505 510
 Glu Gln Gln Met Ser Met Asn Asn Ser His Ser Tyr Gly Asn Cys Leu
 515 520 525
 Gly Met Thr Leu Gln Ser Gln Ser Val Thr Pro Gly Ala Pro Met Ser
 530 535 540
 Ser His Thr Ser Ser Thr His Phe Tyr His Pro Ile His Ser Asn Gly
 545 550 555 560
 Thr Pro Ile His Thr Pro Thr Pro Thr Pro Thr Pro Thr Pro
 565 570 575
 Thr Pro Thr Pro Thr Pro Thr Ser Glu Met Ile Ala Gly Ser Gln Ser
 580 585 590

Leu Ser Arg Glu Ser Pro Cys Ser Arg Leu Ala Gln Thr Thr Pro Val
 595 600 605
 Asp Ser Ala Leu Gly Ser Ser Arg His Thr Pro Ile Gly Thr Pro His
 610 615 620
 Ser Asn Cys Ser Ser Ser Val Pro Pro Ser Pro Val Glu Cys Arg Asn
 625 630 635 640
 Pro Phe Ala Phe Thr Pro Ile Ser Ser Ser Met Ala Tyr His Asp Ala
 645 650 655
 Ser Ile Val Ser Ser Ser Pro Val Lys Pro Met Gln Arg Pro Met Ala
 660 665 670
 Thr His Pro Asp Lys Thr Lys Leu Glu Trp Met Asn Asn Gly Tyr Ser
 675 680 685
 Gly Val Gly Asn Ser Ser Val Ser Gly His Gly Ile Leu Pro Ser Tyr
 690 695 700
 Gln Glu Leu Val Glu Asp Arg Phe Arg Lys Pro His Ala Phe Ala Val
 705 710 715 720
 Pro Gly Gln Ser Tyr Gln Ser Gln Ser Arg His His Asp Thr His Phe
 725 730 735
 Gly Arg Leu Thr Pro Val Ser Pro Val Gln His Gln Gly Ala Thr Val
 740 745 750
 Asn Asn Thr Asn Lys Gln Glu Gly Phe Ala Val Pro Ala Pro Leu Asp
 755 760 765
 Asn Lys Gly Thr Asn Ser Ser Ala Ser Ser Asn Phe Arg Cys Arg Ser
 770 775 780
 Val Ser Pro Ala Val His Arg Gln Arg Asn Leu Ser Gly Ser Thr Leu
 785 790 795 800
 Tyr Pro Val Ser Asn Ile Pro Arg Ser Asn Val Thr Pro Phe Gly Ser
 805 810 815
 Pro Val Thr Pro Glu Val His Val Phe Thr Asn Val His Thr Asp Ala
 820 825 830
 Cys Ala Asn Asn Ile Ala Gln Arg Ser Gln Ser Val Pro Leu Thr Val
 835 840 845
 Met Met Gln Thr Ala Phe Pro Asn Ala Leu Gln Lys Gln Ala Asn Ser
 850 855 860
 Lys Lys Ile Thr Asn Val Leu Leu Ser Lys Leu Asp Ser Asp Asn Asp
 865 870 875 880

Asp Ala Val Arg Gly Leu Gly Met Asn Asn Leu Pro Ser Asn Tyr Thr
 885 890 895
 Ala Arg Met Asn Leu Thr Gln Ile Leu Glu Pro Ser Thr Val Phe Pro
 900 905 910
 Ser Ala Asn Pro Gln Asn Met Ile Asp Ser Ser Thr Ser Val Tyr Glu
 915 920 925
 Phe Gln Thr Pro Ser Tyr Leu Thr Lys Ser Asn Ser Thr Gly Gln Ile
 930 935 940
 Asn Phe Ser Pro Gly Asp Asn Gln Ala Gln Ser Glu Ile Gly Glu Gln
 945 950 955 960
 Gln Leu Asp Phe Asn Ser Thr Val Lys Asp Leu Leu Ser Gly Asp Ser
 965 970 975
 Leu Gln Thr Asn Gln Gln Leu Val Gly Gln Gly Ala Ser Asp Leu Thr
 980 985 990
 Asn Thr Ala Ser Asp Phe Ser Ser Asp Ile Arg Leu Ser Ser Glu Leu
 995 1000 1005
 Ser Gly Ser Ile Asn Asp Leu Asn Thr Leu Asp Pro Asn Leu Leu Phe
 1010 1015 1020
 Asp Pro Gly Arg Gln Gln Gly Gln Asp Asp Glu Ala Thr Leu Glu Glu
 1025 1030 1035 1040
 Leu Lys Asn Asp Pro Leu Phe Gln Gln Ile Cys Ser Glu Ser Met Asn
 1045 1050 1055
 Ser Met Thr Ser Ser Gly Phe Glu Trp Ile Glu Ser Lys Asp His Pro
 1060 1065 1070
 Thr Val Glu Met Leu Gly
 1075

<210> 3969

<211> 988

<212> PRT

<213> Homo sapiens

<400> 3969

Met Ser Ala Gly Asp Ala Lys Asn Leu Leu Asp Thr Lys Leu Pro Thr

1	5	10	15
Ser Glu Leu Lys Ile Tyr Ala Lys Asp Ile Ile Ile Asn Ile Leu Glu			
20	25	30	
Thr Ile Val Lys Glu Phe Gly Lys Val Lys Gln Thr Lys Ala Leu Pro			
35	40	45	
Ser Asp Gln Ile Ile Ala Ala Gly Lys Ile Val Asn Thr Val Leu Gln			
50	55	60	
Glu Leu Tyr Val Thr Asn Asn Cys Asn Leu Ala Tyr Pro Met Lys Ser			
65	70	75	80
Ser His Leu Arg Leu Ser Gln Gly Asn Ile Gly Thr Gly Ser Leu Pro			
85	90	95	
Lys Gln Gln Ala Cys Phe Tyr Leu Glu Asn Val Ser Ser Gln Leu Glu			
100	105	110	
His Ile Phe Pro Arg Glu Gly Ile Phe Lys Lys Leu Phe Asp Lys Trp			
115	120	125	
Gln Thr Glu Ser Asn Asp Lys Glu Asn Glu Lys Cys Lys Leu Leu Met			
130	135	140	
Ile Ala Glu Asn Val Leu Thr Glu Ile Ser Ile Lys Ala Lys Glu Leu			
145	150	155	160
Glu Tyr Ser Leu Ser Leu Leu Asn Leu Pro Pro Leu Glu Asn Cys Glu			
165	170	175	
Ser Arg Phe Tyr Asn His Phe Lys Gly Ala Ser Thr Arg Ala Glu Asp			
180	185	190	
Thr Lys Ala Gln Ile Asn Met Phe Gly Arg Glu Ile Val Glu Met Leu			
195	200	205	
Leu Glu Lys Leu Gln Leu Cys Phe Leu Ser Gln Ile Pro Thr Pro Asp			
210	215	220	
Ser Glu Glu Thr Leu Ser Asn Ser Lys Glu His Ile Thr Ala Lys Ser			
225	230	235	240
Lys Tyr Gly Phe Pro Asn Lys His Ser Leu Ser Ser Leu Pro Ile Tyr			
245	250	255	
Asn Thr Lys Thr Lys Asp Gln Ile Ser Val Gly Ser Ser Asn Gln Ile			
260	265	270	
Val Gln Glu Ile Val Glu Thr Val Leu Asn Met Leu Glu Ser Phe Val			
275	280	285	

Asp Leu Gln Phe Lys His Ile Ser Lys Tyr Glu Phe Ser Glu Ile Val
 290 295 300
 Lys Met Pro Ile Glu Asn Leu Ser Ser Ile Gln Gln Lys Leu Leu Asn
 305 310 315 320
 Lys Lys Arg Leu Pro Lys Leu Gln Pro Leu Lys Met Phe Ser Asp Lys
 325 330 335
 Ser Glu Ser Asn Thr Ile Asn Phe Lys Glu Asn Ile Gln Asn Ile Leu
 340 345 350
 Leu Arg Val His Ser Phe His Ser Gln Leu Leu Thr Tyr Ala Val Asn
 355 360 365
 Ile Ile Ser Asp Met Leu Ala Val Ile Lys Asn Lys Leu Asp Asn Glu
 370 375 380
 Ile Ser Gln Met Glu Pro Ser Ser Ile Ser Ile Leu Lys Glu Asn Ile
 385 390 395 400
 Val Ala Ser Glu Ile Ile Gly Thr Leu Met Asp Gln Cys Thr Tyr Phe
 405 410 415
 Asn Glu Ser Leu Ile Gln Asn Leu Ser Arg Glu Ser Leu Phe Gln Gly
 420 425 430
 Ala Glu Asn Ala Tyr Thr Val Asn Gln Val Glu Leu Ala Thr Asn Met
 435 440 445
 Lys Met Phe Thr Ser Lys Leu Lys Glu Gly Ser Leu Gly Ile Asn Pro
 450 455 460
 Ser Gln Val Ser Lys Thr Gly Phe Val Phe Cys Ser Asp Glu Asp Met
 465 470 475 480
 Lys Glu Lys Tyr Arg Val Ser Ser Asp Leu Pro Thr Ser Val Arg Ser
 485 490 495
 Ser Val Glu Asp Thr Val Lys Asn Ser Glu Pro Thr Lys Arg Pro Asp
 500 505 510
 Ser Glu Thr Met Pro Ser Cys Ser Thr Arg Asn Lys Val Gln Asp His
 515 520 525
 Arg Pro Arg Glu Ser Asn Phe Gly Ser Phe Asp Gln Thr Met Lys Gly
 530 535 540
 Asn Ser Tyr Leu Pro Glu Gly Ser Phe Leu Gln Lys Leu Leu Arg Lys
 545 550 555 560
 Ala Ser Asp Ser Thr Glu Ala Ala Leu Lys Gln Val Leu Ser Phe Ile
 565 570 575

Glu Met Gly Lys Gly Glu Asn Leu Arg Val Phe His Tyr Glu Asn Leu
 580 585 590
 Lys Pro Val Val Glu Pro Asn Gln Ile Gln Thr Thr Ile Ser Pro Leu
 595 600 605
 Lys Ile Cys Leu Ala Ala Glu Asn Ile Val Asn Thr Val Leu Ser Ser
 610 615 620
 Cys Gly Phe Pro Ser Gln Pro His Thr Asn Glu Asn Arg Glu Ile Met
 625 630 635 640
 Lys Pro Phe Phe Ile Ser Lys Gln Ser Ser Leu Ser Glu Val Ser Gly
 645 650 655
 Gly Gln Lys Asp Asn Glu Lys Ser Leu Leu Arg Met Gln Asp Lys Lys
 660 665 670
 Ile Asn Tyr Ile Pro Glu Glu Glu Asn Glu Asn Leu Glu Ala Ser Arg
 675 680 685
 Glu Asp Ser Ser Phe Leu Gln Lys Leu Lys Lys Lys Glu Tyr Pro Lys
 690 695 700
 Ile Glu Thr Val Lys Glu Val Glu Ala Phe Thr Phe Ala Asp His Glu
 705 710 715 720
 Met Gly Ser Asn Glu Val His Leu Ile Ala Arg His Val Thr Thr Ser
 725 730 735
 Val Val Thr Tyr Leu Lys Asn Phe Glu Thr Thr Val Phe Ser Glu Glu
 740 745 750
 Lys Met Ser Val Ser Thr Trp Ser Arg Lys Lys Tyr Glu Ser Lys Gln
 755 760 765
 Phe Leu Arg Asn Ile Tyr Asp Asp Ser Ser Ile Tyr Gln Cys Cys Glu
 770 775 780
 His Leu Thr Glu Ser Val Leu Tyr His Leu Thr Ser Ser Ile Ser Asp
 785 790 795 800
 Gly Thr Lys Lys Gly Arg Glu Lys Glu Lys Ala Trp Glu Ile Gln Glu
 805 810 815
 Ala Thr Phe Ser Lys Ile Ile Ser Ile His Ser Gln Val Phe Glu Ser
 820 825 830
 Arg Ser Ile Ser Ile Gly Glu Leu Ala Leu Cys Ile Ser Glu Ile Ile
 835 840 845
 Ile Lys Ile Leu Phe Asn Asn Lys Ile Ile Gln Ala Asp Ile Ala Gln
 850 855 860

Lys Met Val Ala Ile Pro Thr Lys Tyr Thr Tyr Cys Pro Gly Ile Val
 865 870 875 880
 Ser Gly Gly Phe Asp Asp Leu Phe Gln Asp Leu Leu Val Gly Val Ile
 885 890 895
 His Val Leu Ser Lys Glu Ile Glu Val Asp Tyr His Phe Glu Ser Asn
 900 905 910
 Val Arg Asp Lys Ser Phe Ser Met His Arg Asn Asn Ser Val Pro Ile
 915 920 925
 Cys Asn Lys Ile Asn Arg Gln Ala Ser Pro Arg Asp Trp Gln Phe Ser
 930 935 940
 Thr Gln Gln Ile Gly Gln Leu Phe Gln Lys Asn Lys Leu Ser Tyr Leu
 945 950 955 960
 Ala Cys Lys Leu Asn Ser Leu Val Gly Asn Leu Lys Thr Ser Glu Ser
 965 970 975
 Lys Glu Val Val Asn Lys Val Phe Asn Ile Val Ser
 980 985

<210> 3970

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3970

Met Gln Ser Trp Gly Pro Pro Ala Pro Pro Ala Ser Ser Ser Leu Arg
 1 5 10 15
 Ala Pro His Gln Lys Val Leu Thr Arg Lys Ser Ile Pro Phe Leu Gln
 20 25 30
 His Arg Pro Leu Gly Pro Cys Ser Leu His Leu His Pro Leu Ser His
 35 40 45
 His Ser Pro His Pro His Ser Ser His Arg Ser Arg Ser Ser Ser Trp
 50 55 60
 Ala Ile Pro Thr Thr Pro Pro Arg Val Ser Pro Ala Pro Pro Cys Ala
 65 70 75 80
 Gly Gln Cys Pro Pro Pro Gly Pro Asp Leu Pro Pro Ser Trp Pro Leu
 85 90 95

Pro Arg Pro Glu Pro Ser Val His Ala Ala Val Thr Thr Val Arg Leu
 100 105 110

Ala

<210> 3971

<211> 323

<212> PRT

<213> Homo sapiens

<400> 3971

Met Glu Val Leu Ser Gly Val Ala Lys Gly Tyr Asn Ile Cys Leu Phe
 1 5 10 15
 Ala Tyr Gly Gln Thr Gly Ser Gly Lys Thr Tyr Thr Met Leu Gly Thr
 20 25 30
 Pro Ala Ser Val Gly Leu Thr Pro Arg Ile Cys Glu Gly Leu Phe Val
 35 40 45
 Arg Glu Lys Asp Cys Ala Ser Leu Pro Ser Ser Cys Arg Ile Lys Val
 50 55 60
 Ser Phe Leu Glu Ile Tyr Asn Glu Arg Val Arg Asp Leu Leu Lys Gln
 65 70 75 80
 Ser Gly Gln Lys Lys Ser Tyr Thr Leu Arg Val Arg Glu His Pro Glu
 85 90 95
 Met Gly Pro Tyr Val Gln Gly Leu Ser Gln His Val Val Thr Asn Tyr
 100 105 110
 Lys Gln Val Ile Gln Leu Leu Glu Glu Gly Ile Ala Asn Arg Ile Thr
 115 120 125
 Ala Ala Thr His Val His Glu Ala Ser Ser Arg Ser His Ala Ile Phe
 130 135 140
 Thr Ile His Tyr Thr Gln Ala Ile Leu Glu Asn Asn Leu Pro Ser Glu
 145 150 155 160
 Met Ala Ser Lys Ile Asn Leu Val Asp Leu Ala Gly Ser Glu Arg Ala
 165 170 175
 Asp Pro Ser Tyr Cys Lys Asp Arg Ile Ala Glu Gly Ala Asn Ile Asn
 180 185 190

Lys Ser Leu Val Thr Leu Gly Ile Val Ile Ser Thr Leu Ala Gln Asn
 195 200 205
 Ser Gln Val Phe Ser Ser Cys Gln Ser Leu Asn Ser Ser Val Ser Asn
 210 215 220
 Gly Gly Asp Ser Gly Ile Leu Ser Ser Pro Ser Gly Thr Ser Ser Gly
 225 230 235 240
 Gly Ala Pro Ser Arg Arg Gln Ser Tyr Ile Pro Tyr Arg Asp Ser Val
 245 250 255
 Leu Thr Trp Leu Leu Lys Asp Ser Leu Gly Gly Asn Ser Lys Thr Ile
 260 265 270
 Met Val Ala Ser Glu Trp Asp Ala Arg Ala Gly Pro Val Leu Gly Leu
 275 280 285
 Val Leu Tyr Leu Arg Glu Arg Ala Met Ala Pro Val Ser Gly Met Pro
 290 295 300
 Glu Leu Asp Leu Cys Trp Asp Trp Tyr Ser Ile Ser Glu Lys Gly Pro
 305 310 315 320
 Trp Pro Gln

<210> 3972

<211> 139

<212> PRT

<213> Homo sapiens

<400> 3972

Met Arg Val Thr Leu Gly Leu Glu Gln Arg Asp Thr Ala Glu Trp Pro
 1 5 10 15
 Leu Val Pro Arg Thr Arg Gln Ser Ser Arg Thr Gly Cys Lys Pro Ala
 20 25 30
 Ile Val Ala Met Pro Val Trp Glu Thr Gln Leu Ala Leu Asp Phe Ser
 35 40 45
 Gly Asn His His Val Arg His Ser His Phe His Pro Ser Gln Gly Phe
 50 55 60
 Leu Arg Asp Pro Gly Ser Leu Ser Gln Thr Ser Lys Leu Ser Arg Glu
 65 70 75 80

Cys Val Cys Leu Ser Ser Asn Leu Asn Thr Leu Gly Cys Ser Val Arg
 85 90 95
 Cys Arg Ser Glu Thr Ala Val Glu Thr Arg Phe Pro Ala Leu Gly Trp
 100 105 110
 Gly Pro His Lys Ala Ser Ser Ile Ser Pro Trp Pro Ser Phe Leu Ile
 115 120 125
 Cys Arg Thr Gly Ser Leu Glu Asn Leu Gly Gly
 130 135

<210> 3973

<211> 241

<212> PRT

<213> Homo sapiens

<400> 3973

Met Tyr Ile Tyr Leu Leu Pro Val Arg Phe Glu Arg Ile Phe Phe Phe
 1 5 10 15
 Phe Phe Phe Leu Arg Arg Thr Leu Thr Leu Ser Pro Arg Leu Glu Cys
 20 25 30
 Ser Gly Thr Ile Ser Asp His Cys Asn Leu Cys Leu Pro Gly Ser Ser
 35 40 45
 Asp Ser Pro Thr Ser Ala Ser His Val Ala Gly Ile Thr Gly Ile Arg
 50 55 60
 His His Ala Arg Leu Lys Phe Phe Cys Ile Phe Ser Arg Asp Gly Ala
 65 70 75 80
 Leu Pro Val Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser Gly Asp Leu
 85 90 95
 Pro Ala Leu Ala Ser Gln Ser Ala Val Ile Arg Gly Met Ser His Arg
 100 105 110
 Thr Leu Pro Lys Gly Tyr Ile Arg Pro Tyr Lys Tyr Phe Asp Ser Leu
 115 120 125
 Phe Phe Phe Phe Phe Phe Leu Glu Thr Glu Phe Cys Ser Cys Cys Pro
 130 135 140
 Gly Trp Ser Ala Val Gly Gln Ser Gln Leu Thr Ala Thr Ser Ala Ser
 145 150 155 160

Trp Val Gln Ala Val Leu Leu Pro Gln Ser Pro Glu Trp Leu Gly Leu
 165 170 175
 Gln Ala His Ala Arg Leu Ile Phe Val Phe Leu Val Glu Met Gly Phe
 180 185 190
 His Arg Val Gly Gln Ala Asp Leu Lys Leu Leu Thr Ser Ala His Leu
 195 200 205
 Ser Leu Pro Lys Cys Trp Asp Tyr Arg Arg Glu Pro Pro Arg Pro Ala
 210 215 220
 Lys Tyr Phe Tyr Tyr Thr Met His Ile Val Glu Tyr Met Leu Leu Val
 225 230 235 240
 Leu

<210> 3974

<211> 133

<212> PRT

<213> Homo sapiens

<400> 3974

Met Ser Leu Ser Trp Gly Gly Ile Gln Thr Ala Phe Phe Gly Tyr Gly
 1 5 10 15
 Glu Gly Gly Glu Val Cys Val Cys Thr Cys Val Cys Val Leu Ser Phe
 20 25 30
 Leu Met Pro Leu Asn Phe Phe Ser Phe Leu Phe Phe Phe Leu Arg Gln
 35 40 45
 Ser Leu Ala Leu Ser Pro Arg Leu Glu Cys Ser Gly Ala Asn Leu Ala
 50 55 60
 His Arg Lys Leu His Leu Pro Gly Ser His His Ser Pro Ala Ser Ala
 65 70 75 80
 Ser Arg Val Pro Gly Thr Met Gly Thr Cys Gln His Ala Gln Leu Ile
 85 90 95
 Phe Cys Ile Phe Ser Gly Asp Gly Val Ser Pro Cys Trp Pro Gly Trp
 100 105 110
 Ser Gly Ser Pro Asp Leu Met Ile His Pro Pro Arg Pro Ser Lys Val
 115 120 125

Leu Gly Leu Gln Ala
130

<210> 3975

<211> 109

<212> PRT

<213> Homo sapiens

<400> 3975

Met	Trp	Ala	Ser	Pro	Ala	Pro	Thr	Leu	Ile	Asp	Ser	Gly	Asp	Ser	Val
1				5					10					15	
Val	Ala	Lys	Tyr	Ile	Asn	Arg	Phe	Arg	Gln	Ala	Gln	Pro	Thr	Ser	Arg
			20						25				30		
Glu	Glu	Arg	Gln	Pro	Ala	Gly	Pro	Thr	Pro	Ala	Asp	Phe	Trp	Trp	Leu
		35					40					45			
Gln	Ser	Asp	Ser	Pro	Gly	Pro	Ser	Ser	Gln	Ser	Ala	Ala	Ala	Gly	Ala
	50					55				60					
Asn	Lys	Pro	Glu	Gly	Arg	Pro	His	Thr	Ala	Val	Pro	Thr	Ala	Val	Asn
65				70						75				80	
Val	Thr	Ser	Ala	Ser	His	Ala	Val	Ala	Pro	Leu	Gln	Glu	Ile	Lys	Gln
			85						90					95	
Val	Thr	Ser	Pro	Phe	Thr	Pro	Ser	Leu	Gly	Cys	Leu	Asn			
			100					105							

<210> 3976

<211> 147

<212> PRT

<213> Homo sapiens

<400> 3976

Met Gln Ser Pro Cys Pro Val Ser Pro Glu Thr Gly Gly Pro Cys Phe
1 5 10 15
Pro Val Glu Leu Thr Ala Asp Gly Arg Ala Thr Val Val Trp Val Trp
20 25 30

Pro	Gly	Val	Ile	Gln	Glu	Gly	His	Leu	Gly	Ala	Ser	His	Gly	Gln	Met
35						40						45			
Phe	Ser	Gly	Pro	Pro	Gly	Gly	Val	Thr	Leu	Ala	Ser	Pro	Trp	Ser	Arg
50						55						60			
Gln	Leu	Thr	Ala	Pro	Ala	Pro	Pro	Ser	Pro	Pro	Pro	Cys	Leu	Pro	Cys
65						70						75			
His	Pro	Trp	Gly	Gln	Val	Ser	Ser	Met	Thr	Phe	Pro	Ala	Pro	Ser	Leu
			85						90						
Tyr	Leu	Val	Thr	Val	Asn	Pro	Arg	Arg	Lys	Arg	Arg	Tyr	His	Leu	Leu
			100						105						
Gln	Lys	Ala	Lys	Asn	Gln	Val	Arg	Phe	Gln	Val	Val	Gly	His	Leu	Gly
115						120						125			
Gly	Ser	Pro	Arg	Pro	Thr	Leu	Ala	Gly	Phe	Leu	Arg	Gly	Phe	Gln	Ser
130						135						140			
Thr	Trp	Arg													
145															

<210> 3977

<211> 109

<212> PRT

<213> Homo sapiens

<400> 3977

Met	Ala	Trp	Gly	Ser	Val	Gly	Val	Gly	Pro	Leu	Val	Val	Trp	Val	Cys
1				5					10					15	
Ala	Gly	Val	Gly	Trp	Cys	Gly	Cys	Arg	Arg	Leu	Gly	Gly	Cys	Val	Arg
			20					25					30		
Val	Leu	Gly	Ile	His	Val	Val	Trp	Gly	Cys	Val	Asp	Val	Tyr	Thr	Gly
		35					40					45			
Val	Ser	Ala	Gly	Val	Asp	Gly	Val	Cys	Ala	Gly	Val	Ala	Cys	Leu	Val
	50					55					60				
Trp	Val	Val	Gly	Val	Arg	Ala	Gly	Met	Cys	Val	Val	Cys	Arg	Arg	Val
65					70					75					80
Gly	Ser	Cys	Gly	Gly	Val	Gln	Val	Cys	Val	Leu	Gly	Ile	Asp	Val	Ala
				85					90					95	

Trp Val Ala Gly Cys Val Gln Val Leu Gly Val Cys Arg
 100 105

<210> 3978

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3978

Met Ser Ser Phe Leu Gly Gly Gly Glu Asp Arg Val Leu Leu Cys Arg
 1 5 10 15
 Ala Gly Trp Ser Ala Val Val Arg Ser Arg Leu Thr Ala Leu Ser Ala
 20 25 30
 Ser Trp Val Arg Glu Ile Leu Leu Pro Gln Pro Pro Glu Trp Leu Gly
 35 40 45
 Leu Gln Val Arg Ala Thr Thr Leu Ser Ser Phe Phe Leu Cys Ala Phe
 50 55 60
 Cys Val Val Ala Gly Phe Ser Gln Cys Cys Pro Gly Trp Cys His Thr
 65 70 75 80
 Pro Gly Leu Lys Gln Ser Ser Arg Leu Gly Leu Pro Lys Cys Trp Asp
 85 90 95
 Tyr Arg Arg Glu Pro Arg
 100

<210> 3979

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3979

Met Arg Val Leu His Val Gly Ala Phe Asn Trp Glu Glu Phe Leu Leu
 1 5 10 15
 Ala Cys Asp Gly Phe Ser Asn Gly Ala Glu Ile Pro Lys Tyr Lys Pro
 20 25 30

Ala	Asn	Arg	Ala	Leu	Lys	Phe	His	Gly	Val	Ser	Phe	Pro	Ala	Ala	Cys
35				40				45							
Ser	Gly	Pro	Val	Arg	Cys	Cys	Gly	Met	Phe	Thr	Ile	Glu	Pro	Gly	Ser
50				55				60							
Val	Pro	Leu	Gly	Arg	Ala	Ala	Ala	Leu	Val	Glu	Arg	Val	Arg	Ser	Gly
65				70				75				80			
Pro	Pro	Pro	Arg	Gly	Gln	Pro	Gly	Leu	Ser	Gly	Gly	Gln	Lys	Pro	Leu
				85				90				95			
Met	Glu	Asp	Phe	Ser	Ser	Leu	Val	Ser	Gln	Ala	Gly	Cys	Ile	Phe	Val
100								105				110			
Arg	Leu	Ser													
115															

<210> 3980

$\langle 211 \rangle$ 150

<212> PRT

<213> Homo sapiens

<400> 3980

Met	Met	Cys	Phe	Ile	Ser	Val	Phe	Asp	Val	Phe	Ser	Phe	Phe	Ser	Pro
1				5					10					15	
Gly	Phe	Thr	Ser	Phe	Ala	Ile	Ser	Leu	Cys	Phe	Gly	Phe	Ala	Ala	Asn
				20					25					30	
Leu	Ile	Gly	Leu	Gly	Leu	Ala	Ala	Lys	Ala	Leu	Asp	Ser	Gly	Ala	Phe
				35					40					45	
Phe	Ser	Phe	Val	Val	Leu	Ser	Pro	Ser	Phe	Pro	Leu	Pro	Ser	Cys	Pro
				50					55					60	
His	His	Phe	Thr	Leu	Leu	Lys	Val	Ile	Met	Asn	Thr	Arg	Ser	Glu	Ile
65						70					75				80
Pro	Phe	Leu	Ala	Pro	Ser	Thr	Leu	Gly	Phe	Phe	Glu	Met	Glu	Ser	His
				85						90					95
Cys	Val	Thr	Gln	Ala	Val	Ala	Arg	Leu	Cys	Ala	Leu	Gln	Pro	Pro	Ser
				100						105					110
Pro	Trp	Leu	Lys	Gln	Phe	Ser	Cys	Leu	Ser	Leu	Leu	Ser	Ser	Trp	Asp
				115						120					125

Tyr Arg Cys Lys Pro Arg His Leu Ala Asn Phe Ser Val Phe Ser Arg
 130 135 140
 Asp Gly Val Ser Pro Cys
 145 150

<210> 3981
 <211> 132
 <212> PRT
 <213> Homo sapiens

<400> 3981
 Met Arg Asn Met Ile Pro Gln Asp Asn Glu Asn Pro Pro Gln Gln Gly
 1 5 10 15
 Glu Ala Asn Gln Asn Asp Phe Ala Leu Val Ala Gln Ala Gly Val Gln
 20 25 30
 Trp Leu Asp Leu Gly Pro Gln Leu Pro Leu Leu Pro Gly Phe Lys Arg
 35 40 45
 Phe Phe Cys Leu Ser Leu Leu Ser Ser Cys Gly Tyr Ser Trp Ser Leu
 50 55 60
 Ala Leu Ser Pro Arg Leu Glu Cys Ser Gly Ala Ile Ser Ala Tyr Gly
 65 70 75 80
 Lys Leu Arg Leu Pro Gly Ser Cys His Ser Pro Ala Ser Ala Ser Arg
 85 90 95
 Val Ala Arg Thr Thr Gly Ala Arg His His Thr Arg Leu Ile Phe Val
 100 105 110
 Phe Leu Val Glu Thr Arg Phe His Arg Val Ser Gln Asp Gly Leu Asp
 115 120 125
 Leu Leu Thr Ser
 130

<210> 3982
 <211> 152
 <212> PRT
 <213> Homo sapiens

<400> 3982

Met Arg Asn Gln Ala Pro Gly Arg Pro Lys Gly Ala Thr Phe Pro Pro
 1 5 10 15
 Arg Arg Pro Thr Gly Ser Arg Ala Pro Pro Leu Ala Pro Glu Leu Arg
 20 25 30
 Ala Lys Gln Arg Pro Gly Glu Arg Val Met Ala Leu Pro Val Thr Ala
 35 40 45
 Leu Leu Leu Pro Leu Ala Leu Leu Leu His Ala Ala Arg Pro Ser Gln
 50 55 60
 Phe Arg Val Ser Pro Leu Asp Arg Thr Trp Asn Leu Gly Glu Thr Val
 65 70 75 80
 Glu Leu Lys Cys Gln Val Leu Leu Ser Asn Pro Thr Ser Gly Cys Ser
 85 90 95
 Trp Leu Phe Gln Pro Arg Gly Ala Ala Ala Ser Pro Thr Phe Leu Leu
 100 105 110
 Tyr Leu Ser Gln Asn Lys Pro Lys Ala Ala Glu Gly Leu Asp Thr Gln
 115 120 125
 Arg Phe Ser Gly Lys Arg Leu Gly Asp Thr Phe Val Leu Thr Leu Ser
 130 135 140
 Asp Phe Arg Arg Glu Asn Glu Gly
 145 150

<210> 3983

<211> 130

<212> PRT

<213> Homo sapiens

<400> 3983

Met Gly Phe Pro Gln Arg Arg Leu Gly Lys Ser Val Gly Val Thr Ala
 1 5 10 15
 Gly Gly Leu Leu Leu Gly Leu Gln Glu Arg Gln Asn His Arg Pro Leu
 20 25 30
 Cys Gly Phe Gln Ala Gly Leu Gly Phe Pro Gly Gly Leu Gly Phe Cys
 35 40 45

Ala Leu His Asp Cys Leu Ala Gln Asp Leu Ser His Leu Gln Gln Glu
 50 55 60
 Glu Ala Gly Thr Leu Gly Arg Ala Gly Cys Cys Leu Val Leu Lys Pro
 65 70 75 80
 Leu Ala Ala Cys Pro Ser Ser Ser Arg Ser Ala Val Pro Gly Gly Ala
 85 90 95
 Gly Ser Leu Arg Arg Ala Gly Pro Gly Leu Ser Tyr Pro Leu Arg Ala
 100 105 110
 Trp His Cys Pro Gly Arg Gly Ala Phe Val Gln Tyr Tyr Ser Asn Asp
 115 120 125
 Arg Thr

130

<210> 3984

<211> 270

<212> PRT

<213> Homo sapiens

<400> 3984

Met Ser Ser Arg Lys Gln Gly Ser Gln Pro Arg Gly Gln Gln Ser Ala
 1 5 10 15
 Glu Glu Glu Asn Phe Lys Lys Pro Thr Arg Ser Asn Met Gln Lys Asn
 20 25 30
 Leu Glu Pro Ala Leu Pro Gly Arg Trp Gly Gly Arg Ser Ala Glu Asn
 35 40 45
 Pro Pro Ser Gly Ser Val Arg Lys Thr Arg Lys Asn Lys Gln Lys Thr
 50 55 60
 Pro Gly Asn Gly Asp Gly Gly Ser Thr Ser Glu Ala Pro Gln Pro Pro
 65 70 75 80
 Arg Lys Lys Arg Ala Arg Ala Asp Pro Thr Val Glu Ser Glu Glu Ala
 85 90 95
 Phe Lys Asn Arg Met Glu Val Lys Val Lys Ile Pro Glu Glu Leu Lys
 100 105 110
 Pro Trp Leu Val Glu Asp Trp Asp Leu Val Thr Arg Gln Lys Gln Leu

```

      115              120              125
Phe Gln Leu Pro Ala Lys Lys Asn Val Asp Ala Ile Leu Glu Glu Tyr
      130              135              140
Ala Asn Cys Lys Lys Ser Gln Gly Asn Val Asp Asn Lys Glu Tyr Ala
      145              150              155              160
Val Asn Glu Val Val Ala Gly Ile Lys Glu Tyr Phe Asn Val Met Leu
              165              170              175
Gly Thr Gln Leu Leu Tyr Lys Phe Glu Arg Pro Gln Tyr Ala Glu Ile
              180              185              190
Leu Leu Ala His Pro Asp Ala Pro Met Ser Gln Val Tyr Gly Ala Pro
              195              200              205
His Leu Leu Arg Leu Phe Val Arg Ile Gly Ala Met Leu Ala Tyr Thr
              210              215              220
Pro Leu Asp Glu Lys Ser Leu Ala Leu Leu Leu Gly Tyr Leu His Asp
      225              230              235              240
Phe Leu Lys Tyr Leu Ala Lys Asn Ser Ala Ser Leu Phe Thr Ala Ser
              245              250              255
Asp Tyr Lys Val Ala Ser Ala Glu Tyr His Arg Lys Ala Leu
              260              265              270

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<210> 3985

<211> 499

<212> PRT

<213> Homo sapiens

<400> 3985

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Met Arg His Leu Val His Met Ala Ser Phe Ser Ala Gln Thr Asn Met
      1              5              10              15
His Ala Arg Asn Leu Ala Ile Val Trp Ala Pro Asn Leu Leu Arg Ser
              20              25              30
Lys Asp Ile Glu Ala Ser Gly Phe Asn Gly Thr Ala Ala Phe Met Glu
              35              40              45
Val Arg Val Gln Ser Ile Val Val Glu Phe Ile Leu Thr His Val Asp
              50              55              60
Gln Leu Phe Gly Gly Ala Ala Leu Ser Gly Gly Glu Val Glu Ser Gly

```


65	70	75	80
Trp Arg Ser Leu Pro Gly Thr Arg Ala Ser Gly Ser Pro Glu Asp Leu			
85	90	95	
Met Pro Arg Pro Leu Pro Tyr His Leu Pro Ser Ile Leu Gln Ala Gly			
100	105	110	
Asp Gly Pro Pro Gln Met Arg Pro Tyr His Thr Ile Ile Glu Ile Ala			
115	120	125	
Glu His Lys Arg Lys Gly Ser Leu Lys Val Arg Lys Trp Arg Ser Ile			
130	135	140	
Phe Asn Leu Gly Arg Ser Gly His Glu Thr Lys Arg Lys Leu Pro Arg			
145	150	155	160
Gly Ala Glu Asp Arg Glu Asp Lys Ser Asn Lys Gly Thr Leu Arg Pro			
165	170	175	
Ala Lys Ser Met Gly Ser Leu Ser Ala Ala Ala Gly Ala Ser Asp Glu			
180	185	190	
Pro Glu Gly Leu Val Gly Pro Ser Ser Pro Arg Pro Ser Pro Leu Leu			
195	200	205	
Pro Glu Ser Leu Glu Asn Asp Ser Ile Glu Ala Ala Glu Gly Glu Gln			
210	215	220	
Glu Pro Glu Ala Glu Ala Leu Gly Gly Thr Asn Ser Glu Pro Gly Thr			
225	230	235	240
Pro Arg Ala Gly Arg Ser Ala Ile Arg Ala Gly Gly Ser Ser Arg Ala			
245	250	255	
Glu Arg Cys Ala Gly Val His Ile Ser Asp Pro Tyr Asn Val Asn Leu			
260	265	270	
Pro Leu His Ile Thr Ser Ile Leu Ser Val Pro Pro Asn Ile Ile Ser			
275	280	285	
Asn Val Ser Leu Ala Arg Leu Thr Arg Gly Leu Glu Cys Pro Ala Leu			
290	295	300	
Gln His Arg Pro Ser Pro Ala Ser Gly Pro Gly Pro Gly Pro Gly Leu			
305	310	315	320
Gly Pro Gly Pro Pro Asp Glu Lys Leu Glu Ala Ser Pro Ala Ser Ser			
325	330	335	
Pro Leu Ala Asp Ser Gly Pro Asp Asp Leu Ala Pro Ala Leu Glu Asp			
340	345	350	
Ser Leu Ser Gln Glu Val Gln Asp Ser Phe Ser Phe Leu Glu Asp Ser			

355 360 365
 Ser Ser Ser Glu Pro Glu Trp Val Gly Ala Glu Asp Gly Glu Val Ala
 370 375 380
 Gln Ala Glu Ala Ala Gly Ala Ala Phe Ser Pro Gly Glu Asp Asp Pro
 385 390 395 400
 Gly Met Gly Tyr Leu Glu Glu Leu Leu Gly Val Gly Pro Gln Val Glu
 405 410 415
 Glu Phe Ser Val Glu Pro Pro Leu Asp Asp Leu Ser Leu Asp Glu Ala
 420 425 430
 Gln Phe Val Leu Ala Pro Ser Cys Cys Ser Val Asp Ser Ala Gly Pro
 435 440 445
 Arg Pro Glu Val Glu Glu Glu Asn Gly Glu Glu Val Phe Leu Ser Ala
 450 455 460
 Tyr Asp Asp Leu Ser Pro Leu Leu Gly Leu Leu Leu Gln Pro Gly Trp
 465 470 475 480
 Gly His Arg Ser His Ser Ser Glu Gly Gln Cys Leu Arg Ile Lys Ala
 485 490 495
 Val Phe Leu

<210> 3986

<211> 308

<212> PRT

<213> Homo sapiens

<400> 3986

Met Lys Met Glu Glu Met Ser Leu Ser Gly Leu Asp Asn Ser Lys Leu
 1 5 10 15
 Glu Ala Ile Ala Gln Glu Ile Tyr Ala Asp Leu Val Glu Asp Ser Cys
 20 25 30
 Leu Gly Phe Cys Phe Glu Val His Arg Ala Val Lys Cys Gly Tyr Phe
 35 40 45
 Phe Leu Asp Asp Thr Asp Pro Asp Ser Met Lys Asp Phe Glu Ile Val
 50 55 60
 Asp Gln Pro Gly Leu Asp Ile Phe Gly Gln Ile Phe Asn Gln Trp Lys

65	70	75	80
Ser Lys Glu Cys Val Cys Pro Asn Cys Ser Arg Ser Ile Ala Ala Ser			
	85	90	95
Arg Phe Ala Pro His Leu Glu Lys Cys Leu Gly Met Gly Arg Asn Ser			
	100	105	110
Ser Arg Ile Ala Asn Arg Arg Ile Ala Asn Ser Asn Asn Met Asn Lys			
	115	120	125
Ser Glu Ser Asp Gln Glu Asp Asn Asp Asp Ile Asn Asp Asn Asp Trp			
	130	135	140
Ser Tyr Gly Ser Glu Lys Lys Ala Lys Lys Arg Lys Ser Asp Lys Asn			
145	150	155	160
Pro Asn Ser Pro Arg Arg Ser Lys Ser Leu Lys His Lys Asn Gly Glu			
	165	170	175
Leu Ser Asn Ser Asp Pro Phe Lys Tyr Asn Asn Ser Thr Gly Ile Ser			
	180	185	190
Tyr Glu Thr Leu Gly Pro Glu Glu Leu Arg Ser Leu Leu Thr Thr Gln			
	195	200	205
Cys Gly Val Ile Ser Glu His Thr Lys Lys Met Cys Thr Arg Ser Leu			
	210	215	220
Arg Cys Pro Gln His Thr Asp Gly Gln Arg Arg Thr Val Arg Ile Tyr			
225	230	235	240
Phe Leu Gly Pro Ser Ala Val Leu Pro Glu Val Glu Ser Ser Leu Asp			
	245	250	255
Asn Asp Ser Phe Asp Met Thr Asp Ser Gln Ala Leu Ile Ser Arg Leu			
	260	265	270
Gln Trp Asp Gly Ser Ser Asp Leu Ser Pro Ser Asp Ser Gly Ser Ser			
	275	280	285
Lys Thr Ser Glu Asn Gln Gly Trp Gly Leu Gly Thr Asn Ser Ser Glu			
	290	295	300
Ser Arg Lys Thr			
305			

<210> 3987

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3987

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Met Ala Lys Lys Ile Val Leu Ala Phe Ala Asp Gln Cys Asn Asn Gln
 1              5              10              15
Leu Ala Asn Ala Ala Val Ser Ser Asp Ser Tyr Val Leu Cys Asn Ile
              20              25              30
Leu Arg Thr Gln Phe Phe Phe Phe Leu Phe Val Cys Leu Phe Phe Glu
              35              40              45
Ala Glu Ser Arg Ser Val Thr Gln Val Gly Val Gln Trp Arg His Leu
              50              55              60
Gly Ser Leu Tyr Ala Pro Pro Pro Arg Phe Thr Pro Phe Ser Cys Leu
 65              70              75              80
Ser Leu Pro Ser Ser Trp Asp Cys Arg Cys Leu Pro Pro Cys Pro Ala
              85              90              95
Asp Phe Phe Cys Ile Phe Ser Gly Asp Gly Ile Ser Pro Cys Trp Pro
              100             105             110
Gly Trp Ser Arg Ser Pro Asp Leu Met Ser His His Thr Arg Pro Gly
              115             120             125
Thr Gln Phe Leu Ile Arg Leu Val Leu Phe Leu Ile Phe Ser Gln Val
              130             135             140
Trp Leu Ile Leu Val Leu Phe Phe Phe
145              150

```

<210> 3988

<211> 146

<212> PRT

<213> Homo sapiens

<400> 3988

```

Met Ser His Arg Ala Arg Leu Leu Leu Phe Phe Leu Arg Cys Ser Leu
 1              5              10              15
Thr Leu Leu Pro Arg Leu Glu Cys Ser Gly Val Ile Ser Ala His Cys
              20              25              30
Ser Arg Ser Leu Leu Gly Ser Asn Asp Ser Pro Ala Ser Ala Ser Gln

```

35 40 45
 Val Ala Gly Ile Thr Gly Ala Cys His His Ala Gln Leu Ile Phe Val
 50 55 60
 Phe Leu Val Glu Met Gly Phe His His Val Gly Gln Ala Gly Leu Glu
 65 70 75 80
 Leu Leu Thr Ser Gly Asp Pro Pro Thr Ser Ala Ser Gln Ser Ala Gly
 85 90 95
 Ile Thr Gly Val Ser Asn Leu Ala Arg Pro Gly Ala Val Thr Phe Lys
 100 105 110
 Ala Arg Arg Pro Glu Arg Arg Leu Val Gln Arg Ser Gln Gly Ser Glu
 115 120 125
 Gly Leu Arg Pro Gly Arg Gln Glu Pro Gly Asp Met Asp Ile Cys Glu
 130 135 140
 Gly Glu
 145

<210> 3989

<211> 609

<212> PRT

<213> Homo sapiens

<400> 3989

Met Glu Ala Glu Phe Tyr Met Val Ile Leu Thr Cys Leu Ile Phe Arg
 1 5 10 15
 Asn Ser Glu Gly Phe Gln Ile Val His Val Gln Lys Gln Gln Cys Leu
 20 25 30
 Phe Lys Asn Glu Lys Val Val Val Gly Ser Cys Asn Arg Thr Ile Gln
 35 40 45
 Asn Gln Gln Trp Met Trp Thr Glu Asp Glu Lys Leu Leu His Val Lys
 50 55 60
 Ser Ala Leu Cys Leu Ala Ile Ser Asn Ser Ser Arg Gly Pro Ser Arg
 65 70 75 80
 Ser Ala Ile Leu Asp Arg Cys Ser Gln Ala Pro Arg Trp Thr Cys Tyr
 85 90 95
 Asp Gln Glu Gly Phe Leu Glu Val Glu Asn Ala Ser Leu Phe Leu Gln

100	105	110
Lys Gln Gly Ser Arg Val Val Val	Lys Lys Ala Arg Lys Tyr Leu His	
115	120	125
Ser Trp Met Lys Ile Asp Val Asn Lys Glu Gly Lys Leu Val Asn Glu		
130	135	140
Ser Leu Cys Leu Gln Lys Ala Gly Leu Gly Ala Glu Val Ser Val Arg		
145	150	155
Ser Thr Arg Asn Thr Ala Pro Pro Gln Ile Leu Thr Thr Phe Asn Ala		
165	170	175
Val Pro Asp Gly Leu Val Phe Leu Ile Arg Asn Thr Thr Glu Ala Phe		
180	185	190
Ile Arg Asn Ala Ala Glu Asn Tyr Ser Gln Asn Ser Ser Glu Arg Gln		
195	200	205
His Pro Asn Leu His Met Thr Gly Ile Thr Asp Thr Ser Trp Val Leu		
210	215	220
Ser Thr Thr Gln Pro Phe Ser Ser Thr Thr Glu Glu Thr Gly Leu Ala		
225	230	235
Glu Pro Glu Arg Cys Asn Phe Thr Leu Ala Glu Ser Lys Ala Ser Ser		
245	250	255
His Ser Val Ser Ile Gln Trp Arg Ile Leu Gly Ser Pro Cys Asn Phe		
260	265	270
Ser Leu Ile Tyr Ser Ser Asp Thr Leu Gly Ala Ala Leu Cys Pro Thr		
275	280	285
Phe Arg Ile Asp Asn Thr Thr Tyr Gly Cys Asn Leu Gln Asp Leu Gln		
290	295	300
Ala Gly Thr Ile Tyr Asn Phe Arg Ile Ile Ser Leu Asp Glu Glu Arg		
305	310	315
Thr Val Val Leu Gln Thr Asp Pro Leu Pro Pro Ala Arg Phe Gly Val		
325	330	335
Ser Lys Glu Lys Thr Thr Ser Thr Ser Leu His Val Trp Trp Thr Pro		
340	345	350
Ser Ser Gly Lys Val Thr Ser Tyr Glu Val Gln Leu Phe Asp Glu Asn		
355	360	365
Asn Gln Lys Ile Gln Gly Val Gln Ile Gln Glu Ser Thr Ser Trp Asn		
370	375	380
Glu Tyr Thr Phe Phe Asn Leu Thr Ala Gly Ser Lys Tyr Asn Ile Ala		

385 390 395 400
 Ile Thr Ala Val Ser Gly Gly Lys Arg Ser Phe Ser Val Tyr Thr Asn
 405 410 415
 Gly Ser Thr Val Pro Ser Pro Val Lys Asp Ile Gly Ile Ser Thr Lys
 420 425 430
 Ala Asn Ser Leu Leu Ile Ser Trp Ser His Gly Ser Gly Asn Val Glu
 435 440 445
 Arg Tyr Arg Leu Val Leu Met Asp Lys Gly Ile Leu Val His Gly Gly
 450 455 460
 Val Val Asp Lys His Ala Thr Ser Tyr Ala Phe His Gly Leu Thr Pro
 465 470 475 480
 Gly Tyr Leu Tyr Asn Leu Thr Val Met Thr Glu Ala Ala Gly Leu Gln
 485 490 495
 Asn Tyr Arg Trp Lys Leu Val Arg Thr Ala Pro Met Glu Val Ser Asn
 500 505 510
 Leu Lys Val Thr Asn Asp Gly Ser Leu Thr Ser Leu Lys Val Lys Trp
 515 520 525
 Gln Arg Pro Pro Gly Asn Val Asp Ser Tyr Asn Ile Thr Leu Ser His
 530 535 540
 Lys Gly Thr Ile Lys Glu Ser Arg Val Leu Ala Pro Trp Ile Thr Glu
 545 550 555 560
 Thr His Phe Lys Glu Leu Val Pro Gly Arg Leu Tyr Gln Val Thr Val
 565 570 575
 Ser Cys Val Ser Gly Glu Leu Ser Ala Gln Lys Met Ala Val Gly Arg
 580 585 590
 Thr Cys Glu Ser Trp Ala Pro Glu Cys Ser Leu Val Ala Gln Ile Thr
 595 600 605
 Leu

<210> 3990

<211> 175

<212> PRT

<213> Homo sapiens

<400> 3990

```

Met Trp Trp His Leu Cys Thr His Ser Ala Val His Pro Pro Thr Pro
 1              5              10              15
Ser Ser Phe Lys Arg His Ser Ser Pro Gln Lys Lys Pro Pro Val Leu
      20              25              30
Ile Lys Gln Leu Pro Leu Leu Gly Ile Pro Gln Ala Pro Leu Leu Gly
      35              40              45
Ser Glu Glu Gly Leu Ala Ser Glu Arg Ser Ser Asp Asn Lys Glu Ser
      50              55              60
Gly Thr His Cys Trp Ser Arg Pro Gly Leu Val Phe His Pro Ala Glu
      65              70              75              80
Val Ala Glu Pro Gly Gly Ser Gly Ser Ala Thr Gly Glu Pro His Ala
      85              90              95
Cys Arg Arg Ser Pro Ala Pro Pro Arg Ala Ser Pro Pro Gly Gly Ser
      100             105             110
Arg Glu Leu Ser Arg Thr Arg Arg Gly Ala Gly Gly Lys Gln Trp Leu
      115             120             125
Arg Ala Ala Asp Lys Pro His Val Asp Pro Arg Pro Leu Ser Leu Trp
      130             135             140
Val Gly Leu Gly Asn Trp Arg Gly Gly Arg Met Ile Gly Asn Met Lys
      145             150             155             160
Thr Ala Arg Pro Gly Trp Ser Ser Gly Lys Arg Arg His Gly His
      165             170             175

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<210> 3991

<211> 134

<212> PRT

<213> Homo sapiens

<400> 3991

```

Met Tyr Leu Val Ala Leu Thr Gly Pro Ser Leu Tyr Asn Pro Phe Leu
 1              5              10              15
Thr Ser Ser Lys Pro Pro Ser Ser Leu Pro Leu Lys Phe Leu Phe Phe
      20              25              30
Phe Asn Pro Leu Gly Leu Leu Ile Tyr His Ile Pro Gln Val Glu Pro

```


35 40 45
 Arg Asp Leu Asp Phe Ser Thr Ser His Gly Ala Val Ser Ala Thr Pro
 50 55 60
 Pro Ala Pro Thr Leu Val Ser Gly Asp Pro Trp Tyr Pro Trp Tyr Asn
 65 70 75 80
 Trp Lys Gln Pro Pro Glu Arg Glu Leu Ser Arg Leu Arg Arg Leu Tyr
 85 90 95
 Gln Gly His Leu Gln Glu Glu Ser Gly Pro Pro Pro Glu Ser Met Pro
 100 105 110
 Lys Met Pro Pro Arg Thr Pro Ala Glu Ala Ser Ser Thr Gly Gln Thr
 115 120 125
 Gly Pro Gln Ser Ala Leu
 130

<210> 3992

<211> 173

<212> PRT

<213> Homo sapiens

<400> 3992

Met Leu Ile Asn Leu Phe Ser Val Phe Arg Thr Leu Ser Phe Val Ser
 1 5 10 15
 Cys Ala Thr Gln Met Phe Phe Phe Leu Gly Phe Ala Val Thr Asn Cys
 20 25 30
 Leu Leu Leu Gly Val Met Gly Tyr Asp Arg Tyr Ala Ala Ile Cys Gln
 35 40 45
 Pro Leu Gln Tyr Ala Val Leu Met Ser Trp Arg Val Cys Gly Gln Leu
 50 55 60
 Ile Ala Thr Cys Ile Ile Ser Gly Phe Leu Ile Ser Leu Val Gly Thr
 65 70 75 80
 Thr Phe Val Phe Ser Leu Pro Phe Cys Gly Ser Asn Lys Val Asn His
 85 90 95
 Tyr Phe Cys Asp Ile Ser Pro Val Ile Arg Leu Ala Cys Ala Asp Ser
 100 105 110
 Tyr Ile Gly Glu Leu Val Ile Phe Ile Phe Gly Val Leu Val Leu Val

```

      115              120              125
Val Pro Leu Ile Phe Ile Cys Ile Ser Tyr Gly Phe Ile Val Arg Thr
      130              135              140
Ile Leu Lys Ile Pro Ser Ala Glu Gly Lys Gln Lys Ala Phe Ser Thr
      145              150              155              160
Cys Ala Ser His Leu Ile Val Val Ile Val His Tyr Gly
      165              170

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<210> 3993

<211> 324

<212> PRT

<213> Homo sapiens

<400> 3993

```

Met Asn His Met Ser Ala Ser Leu Lys Ile Ser Asn Ser Ser Lys Phe
  1              5              10              15
Gln Val Ser Glu Phe Ile Leu Leu Gly Phe Pro Gly Ile His Ser Trp
      20              25              30
Gln His Trp Leu Ser Leu Pro Leu Ala Leu Leu Tyr Leu Ser Ala Leu
      35              40              45
Ala Ala Asn Thr Leu Ile Leu Ile Ile Ile Trp Gln Asn Pro Ser Leu
      50              55              60
Gln Gln Pro Met Tyr Ile Phe Leu Gly Ile Leu Cys Met Val Asp Met
      65              70              75              80
Gly Leu Ala Thr Thr Ile Ile Pro Lys Ile Leu Ala Ile Phe Trp Phe
      85              90              95
Asp Ala Lys Val Ile Ser Leu Pro Glu Arg Phe Ala Gln Ile Tyr Ala
      100             105             110
Ile His Phe Phe Val Gly Met Glu Ser Gly Ile Leu Leu Cys Met Ala
      115             120             125
Phe Asp Arg Tyr Val Ala Ile Cys His Pro Leu Arg Tyr Pro Ser Ile
      130             135             140
Val Thr Ser Ser Leu Ile Leu Lys Ala Thr Leu Phe Met Val Leu Arg
      145             150             155             160
Asn Gly Leu Phe Val Thr Pro Val Pro Val Leu Ala Ala Gln Arg Asp

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	165	170	175
Tyr Cys Ser Lys Ser Glu Ile Glu His Cys Leu Cys Ser Asn Leu Gly			
	180	185	190
Val Thr Ser Leu Ala Cys Asp Asp Arg Arg Pro Asn Ser Ile Cys Gln			
	195	200	205
Leu Val Leu Ala Trp Leu Gly Met Gly Ser Asp Leu Ser Leu Ile Ile			
	210	215	220
Leu Ser Tyr Ile Leu Ile Leu Tyr Ser Val Leu Arg Leu Asn Ser Ala			
225	230	235	240
Glu Ala Ala Ala Lys Ala Leu Ser Thr Cys Ser Ser His Leu Thr Leu			
	245	250	255
Ile Leu Phe Phe Tyr Thr Ile Val Val Val Ile Ser Val Thr His Leu			
	260	265	270
Thr Glu Met Lys Ala Thr Leu Ile Pro Val Leu Leu Asn Val Leu His			
	275	280	285
Asn Ile Ile Pro Pro Ser Leu Asn Pro Thr Val Tyr Ala Leu Gln Thr			
	290	295	300
Lys Glu Leu Arg Ala Ala Phe Gln Lys Val Leu Phe Ala Leu Thr Lys			
305	310	315	320
Glu Ile Arg Ser			

<210> 3994

<211> 306

<212> PRT

<213> Homo sapiens

<400> 3994

Met Leu Phe Gly Ser Glu Ile Cys Lys Glu Gly Lys Cys Val Asn Thr
1 5 10 15
Gln Pro Gly Tyr Glu Cys Tyr Cys Lys Gln Gly Phe Tyr Tyr Asp Gly
20 25 30
Asn Leu Leu Glu Cys Val Asp Val Asp Glu Cys Leu Asp Glu Ser Asn
35 40 45
Cys Arg Asn Gly Val Cys Glu Asn Thr Arg Gly Gly Tyr Arg Cys Ala

50	55	60
Cys Thr Pro Pro Ala Glu Tyr Ser Pro Ala Gln Arg Gln Cys Leu Ser		
65	70	75
Pro Glu Glu Met Asp Val Asp Glu Cys Gln Asp Pro Ala Ala Cys Arg		
85	90	95
Pro Gly Arg Cys Val Asn Leu Pro Gly Ser Tyr Arg Cys Glu Cys Arg		
100	105	110
Pro Pro Trp Val Pro Gly Pro Ser Gly Arg Asp Cys Gln Leu Pro Glu		
115	120	125
Ser Pro Ala Glu Arg Ala Pro Glu Arg Arg Asp Val Cys Trp Ser Gln		
130	135	140
Arg Gly Glu Asp Gly Met Cys Ala Gly Pro Leu Ala Gly Pro Ala Leu		
145	150	155
Thr Phe Asp Asp Cys Cys Cys Arg Gln Gly Arg Gly Trp Gly Ala Gln		
165	170	175
Cys Arg Pro Cys Pro Pro Arg Gly Ala Gly Ser His Cys Pro Thr Ser		
180	185	190
Gln Ser Glu Ser Asn Ser Phe Trp Asp Thr Ser Pro Leu Leu Leu Gly		
195	200	205
Lys Pro Pro Arg Asp Glu Asp Ser Ser Glu Glu Asp Ser Asp Glu Cys		
210	215	220
Arg Cys Val Ser Gly Arg Cys Val Pro Arg Pro Gly Gly Ala Val Cys		
225	230	235
Glu Cys Pro Gly Gly Phe Gln Leu Asp Ala Ser Arg Ala Arg Cys Val		
245	250	255
Asp Ile Asp Glu Cys Arg Glu Leu Asn Gln Arg Gly Pro Leu Cys Lys		
260	265	270
Ser Glu Arg Cys Val Asn Thr Ser Gly Ser Phe Arg Cys Val Cys Lys		
275	280	285
Ala Gly Phe Ala Arg Ser Arg Pro His Gly Ala Cys Val Pro Gln Arg		
290	295	300
Arg Arg		
305		

<211> 450

<212> PRT

<213> Homo sapiens

<400> 3995

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Met Ile Leu Leu Val Asn Leu Phe Val Leu Leu Ser Val Val Cys Val
  1             5             10            15
Leu Leu Asn Leu Ala Gly Phe Ile Leu Gly Cys Gln Gly Ala Gln Phe
      20             25            30
Val Ser Ser Val Pro Arg Cys Asp Leu Val Asp Leu Gly Glu Gly Lys
      35             40            45
Ile Cys Phe Cys Cys Glu Glu Phe Gln Pro Ala Lys Cys Thr Asp Lys
      50             55            60
Glu Asn Ala Leu Lys Leu Phe Pro Val Gln Pro Cys Ser Ala Val His
      65             70            75            80
Leu Leu Leu Lys Lys Val Leu Phe Ala Leu Cys Ala Leu Asn Ala Leu
      85             90            95
Thr Thr Thr Val Cys Leu Val Ala Ala Ala Leu Arg Tyr Leu Gln Ile
      100            105            110
Phe Ala Thr Arg Arg Ser Cys Ile Asp Glu Ser Gln Ile Ser Ala Glu
      115            120            125
Glu Ala Glu Asp His Gly Arg Ile Pro Asp Pro Asp Asp Phe Val Pro
      130            135            140
Pro Val Pro Pro Pro Ser Tyr Phe Ala Thr Phe Tyr Ser Cys Thr Pro
      145            150            155            160
Arg Met Asn Arg Arg Met Val Gly Pro Asp Val Ile Pro Leu Pro His
      165            170            175
Ile Tyr Gly Ala Arg Ile Lys Gly Val Glu Val Phe Cys Pro Leu Asp
      180            185            190
Pro Pro Pro Pro Tyr Glu Ala Val Val Ser Gln Met Asp Gln Glu Gln
      195            200            205
Gly Ser Ser Phe Gln Met Ser Glu Gly Ser Glu Ala Ala Val Ile Pro
      210            215            220
Leu Asp Leu Gly Cys Thr Gln Val Thr Gln Asp Gly Asp Ile Pro Asn
      225            230            235            240
Ile Pro Ala Glu Glu Asn Ala Ser Thr Ser Thr Pro Ser Ser Thr Leu

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245 250 255
 Val Arg Pro Ile Arg Ser Arg Arg Ala Leu Pro Pro Leu Arg Thr Arg
 260 265 270
 Ser Lys Ser Asp Pro Val Leu His Pro Ser Glu Glu Arg Ala Ala Pro
 275 280 285
 Val Leu Ser Cys Glu Ala Ala Thr Gln Thr Glu Arg Arg Leu Asp Leu
 290 295 300
 Ala Ala Val Thr Leu Arg Arg Gly Leu Arg Ser Arg Ala Ser Arg Cys
 305 310 315 320
 Arg Pro Arg Ser Leu Ile Asp Tyr Lys Ser Tyr Met Asp Thr Lys Leu
 325 330 335
 Leu Val Ala Arg Phe Leu Glu Gln Ser Ser Cys Thr Met Thr Pro Asp
 340 345 350
 Ile His Glu Leu Val Glu Asn Ile Lys Ser Val Leu Lys Ser Asp Glu
 355 360 365
 Glu His Met Glu Glu Ala Ile Thr Ser Ala Ser Phe Leu Glu Gln Ile
 370 375 380
 Met Ala Pro Leu Gln Pro Ser Thr Ser Arg Ala His Arg Leu Pro Ser
 385 390 395 400
 Arg Arg Gln Pro Gly Leu Leu His Leu Gln Ser Cys Gly Asp Leu His
 405 410 415
 Thr Phe Thr Pro Ala Gly Arg Pro Arg Ala Glu Arg Arg Pro Arg Arg
 420 425 430
 Val Glu Ala Glu Arg Pro His Ser Leu Ile Gly Val Ile Arg Glu Thr
 435 440 445
 Val Leu
 450

<210> 3996

<211> 111

<212> PRT

<213> Homo sapiens

<400> 3996

Met Phe Lys Cys Leu Ile Phe Phe Val Ile Met Ser Gly Ile Met Ile

115	120	125
Ala His Ser Ser Ser Met Gly Pro Val	Ala His Ser Val	Glu Tyr Ser
130	135	140
Ile Ala Asp Ser Phe Glu Ile Glu Thr Glu Pro Gln Ala Ala Val Leu		
145	150	155
His Leu Gln Ser Ala Glu Glu Leu Asp Cys Gln Gly Glu Glu Glu Glu		
165	170	175
Glu Glu Glu Asp Gly Ser Ser Phe Cys Ser Gly Val Thr Asp Ser Ser		
180	185	190
Thr Gln Ser Leu Ala Pro Ser Glu Ser Asp Glu Glu Glu Glu Glu Glu		
195	200	205
Glu Glu Glu Glu Glu Glu Glu Asp Asp Asp Asp Asp Lys Gly Asp Gly		
210	215	220
Phe Val Glu Gly Leu Gly Thr His Ala Glu Val Val Pro Leu Pro Ser		
225	230	235
Val Leu Cys Tyr Ser Asp Gly Thr Ala Val His Glu Ser His Ala Lys		
245	250	255
Asn Ala Ser Phe Tyr Ala Asn Ser Ser Thr Leu Tyr Tyr Gln Asn Asp		
260	265	270
Ser Gly Val Pro Cys Asn Ser Leu Tyr Pro Glu His Arg Ser Asn His		
275	280	285
Pro Gln Val Glu Phe His Ser Tyr Leu Lys Gly Pro Ser Gln Glu Gly		
290	295	300
Phe Val Ser Ala Leu Asn Gly Asp Ser His Ile Ser Glu His Pro Ala		
305	310	315
Glu Asn Ser Leu Ser Leu Ala Glu Lys Ser Ile Leu His Glu Glu Cys		
325	330	335
Ile Lys Ser Pro Val Val Glu Thr Val Pro Val		
340	345	

<210> 3998

<211> 111

<212> PRT

<213> Homo sapiens

<400> 3998

Met Gly Glu Arg Lys Gly Ile Cys Glu Gly Asp Trp Leu Ala Lys Pro
 1 5 10 15
 Lys Ile Phe Leu Met Trp Pro Tyr Ile Glu Lys Ala Cys Val Phe Trp
 20 25 30
 Thr Arg Ala Ile Lys Gly Asn Ser Leu Asp Leu Lys Leu Leu Lys Ile
 35 40 45
 Asn Ser Ala Gln Ile Ala Leu Gly Ser Gln Arg Pro Cys Trp Ser Ser
 50 55 60
 Lys Gly Ser Val Gln Ser Val Val Ser Lys Asp Arg Ser Gln Leu Ser
 65 70 75 80
 Gln Glu Ser Glu Tyr Lys Tyr Ser Glu Pro Ile Asn Arg Gln Ile Ile
 85 90 95
 Ile Tyr Thr Met Ser Gln Pro Val Asp Gly Ile Ile Cys His His
 100 105 110

<210> 3999

<211> 434

<212> PRT

<213> Homo sapiens

<400> 3999

Met Arg Val Thr Ala Pro Arg Thr Leu Leu Leu Leu Leu Trp Gly Ala
 1 5 10 15
 Val Ala Leu Thr Glu Thr Trp Ala Gly Ser His Ser Met Arg Tyr Phe
 20 25 30
 His Thr Ser Val Ser Arg Pro Gly Arg Gly Glu Pro Arg Phe Ile Thr
 35 40 45
 Val Gly Tyr Val Asp Asp Thr Leu Phe Val Arg Phe Asp Ser Asp Ala
 50 55 60
 Thr Ser Pro Arg Lys Glu Pro Arg Ala Pro Trp Ile Glu Gln Glu Gly
 65 70 75 80
 Pro Glu Tyr Trp Asp Gln Glu Thr Gln Ile Ser Lys Thr Asn Thr Gln
 85 90 95

Thr Tyr Arg Glu Ser Leu Arg Asn Leu Arg Gly Tyr Tyr Asn Pro Gly
 100 105 110
 Arg Arg Ser Arg Leu Pro Ile Pro His Val Arg Pro Gly Ser Pro Arg
 115 120 125
 Val Ser Gly Ser Glu Ile Arg Pro Arg Gly Arg Gly Thr Arg Pro Asp
 130 135 140
 Pro Arg Pro Ala Arg Ala Pro Gly Ala Phe Thr Arg Phe His Phe Gln
 145 150 155 160
 Leu Arg Pro Lys Ser Pro Arg Val Gly Arg Gly Gly Ala Gly Leu Gly
 165 170 175
 Gly Thr Gly Leu Thr Ala Gly Ala Gly Pro Gly Ser His Thr Leu Gln
 180 185 190
 Ser Met Tyr Gly Cys Asp Val Gly Pro Asp Gly Arg Leu Leu Arg Gly
 195 200 205
 His Asn Gln Tyr Ala Tyr Asp Gly Lys Asp Tyr Ile Ala Leu Asn Glu
 210 215 220
 Asp Leu Arg Ser Trp Thr Ala Ala Asp Thr Ala Ala Gln Ile Thr Gln
 225 230 235 240
 Arg Lys Trp Glu Ala Ala Arg Val Ala Glu Gln Leu Arg Ala Tyr Leu
 245 250 255
 Glu Gly Glu Cys Val Glu Trp Leu Arg Arg Tyr Leu Glu Asn Gly Lys
 260 265 270
 Glu Thr Leu Gln Arg Ala Asp Pro Pro Lys Thr His Val Thr His His
 275 280 285
 Pro Ile Ser Asp His Glu Ala Thr Leu Arg Cys Trp Ala Leu Gly Phe
 290 295 300
 Tyr Pro Ala Glu Ile Thr Leu Thr Trp Gln Arg Asp Gly Glu Asp Gln
 305 310 315 320
 Thr Gln Asp Thr Glu Leu Val Glu Thr Arg Pro Ala Gly Asp Arg Thr
 325 330 335
 Phe Gln Lys Trp Ala Ala Val Val Val Pro Ser Gly Glu Glu Gln Arg
 340 345 350
 Tyr Thr Cys His Val Gln His Glu Gly Leu Pro Lys Pro Leu Thr Leu
 355 360 365
 Arg Trp Glu Pro Ser Ser Gln Ser Thr Val Pro Ile Val Gly Ile Val
 370 375 380

Ala Gly Leu Ala Val Leu Ala Val Val Val Ile Gly Ala Val Val Ala
 385 390 395 400
 Ala Val Met Cys Arg Arg Lys Ser Ser Gly Gly Lys Gly Gly Ser Tyr
 405 410 415
 Ser Gln Ala Ala Cys Ser Asp Ser Ala Gln Gly Ser Asp Val Ser Leu
 420 425 430
 Thr Ala

<210> 4000

<211> 145

<212> PRT

<213> Homo sapiens

<400> 4000

Met Lys Trp Val Glu Met Thr Ser His Trp Glu Lys Thr Met Ser Arg
 1 5 10 15
 Arg Tyr Lys Lys Val Arg Gly Ala Gly Ala Pro Leu Gly Phe His Gly
 20 25 30
 Ser Phe Leu Ser Ala Ser Ala His Ile Leu Ala Lys Cys Thr His Pro
 35 40 45
 Val Ser Gln His Leu Arg Pro Leu Leu Pro Ala Thr Gln Ser Gly Pro
 50 55 60
 Leu Pro Ala Asp Glu Leu Cys Leu Gly Pro Ala Ser Arg Ser Tyr Gly
 65 70 75 80
 Gly Cys Leu Val Glu Pro Leu Ala Ser Pro Thr Gly Lys Asp Ala Val
 85 90 95
 Pro Glu Arg His Pro Val Cys Pro Ala Arg Pro Met Leu Ala Pro Val
 100 105 110
 Val Trp Gly Pro Cys Val Pro Glu Glu Gln Pro Trp His Leu Ser Gly
 115 120 125
 Glu Gly Val Gly Arg Gly Pro Asn Ser Pro Thr Gln Ser Pro Ser Pro
 130 135 140
 His
 145

<210> 4001

<211> 468

<212> PRT

<213> Homo sapiens

<400> 4001

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Met Glu Leu Gly Leu Ser Trp Val Phe Leu Val Ala Ile Leu Glu Gly
  1             5             10             15
Val His Cys Glu Val Gln Leu Val Glu Ser Gly Gly Arg Leu Val Arg
          20             25             30
Pro Gly Gly Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Phe Asp Phe
          35             40             45
Ser Tyr Tyr Trp Met Ala Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
          50             55             60
Glu Trp Val Ala Asn Ile Arg Lys Asp Gly Ser Asp Lys Tyr Tyr Val
          65             70             75             80
Asp Ser Val Lys Gly Arg Phe Ser Ile Ser Arg Asp Asn Ser Lys Asn
          85             90             95
Ser Leu Tyr Leu Gln Met Thr Ser Leu Arg Ala Asn Asp Thr Ala Val
          100            105            110
Tyr Tyr Cys Ala Thr Val Pro Asp Leu Asp Ser Asp Ser Phe Leu Trp
          115            120            125
Gly Arg Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro
          130            135            140
Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr
          145            150            155            160
Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr
          165            170            175
Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro
          180            185            190
Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr
          195            200            205
Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn
          210            215            220

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$\langle 210 \rangle$ 4002
 $\langle 211 \rangle$ 159

<212> PRT

<213> Homo sapiens

<400> 4002

Met Asp Met Gly Leu Lys Leu Gly His Pro Thr Leu Thr Gly Asn Trp
 1 5 10 15
 Gln Ile Ser Asp Pro Asn Ala Leu Ser Pro Pro Ser Pro Leu Thr Pro
 20 25 30
 Gln Pro Ala Ile Thr Lys Arg Pro Lys Ala Cys Phe Phe His Gln Pro
 35 40 45
 Pro Ala Gln Phe Leu Phe Ser Thr Arg Lys Ala Gly Val Val Leu Thr
 50 55 60
 Pro Tyr Ile Pro Pro Ala Pro Arg Arg Ile Gly Phe Thr Val Gly Arg
 65 70 75 80
 Val Ala Ile Lys Pro Glu Pro Ser Gln Pro Thr Arg Ser Gln Arg Glu
 85 90 95
 Lys Ala Arg Gly Gly Arg Thr Ser Val Val Leu Ser Ile Asn Trp Leu
 100 105 110
 Trp Gly Gly Gly Met Gly Trp Ser Ser His Leu Ala Ser His Leu Val
 115 120 125
 Met Arg Thr Ser Lys Asn Leu Gln Gln Glu Arg Ser Phe His Ser Lys
 130 135 140
 Val Lys Gly Arg Gly Ala Ala Ala Leu Gly Leu Pro Gly Arg Asn
 145 150 155

<210> 4003

<211> 169

<212> PRT

<213> Homo sapiens

<400> 4003

Met Ser Ala Pro Pro Ala Leu Gln Ile Arg Glu Ala Asn Ala His Leu
 1 5 10 15
 Ala Ala Val His Arg Arg Ala Ala Glu Leu Glu Ala Arg Leu Asp Ala
 20 25 30

Ala Glu Arg Thr Val His Ala Gln Ala Glu Arg Leu Ala Leu His Asp
 35 40 45
 Gln Gln Leu Arg Ala Ala Leu Asp Glu Leu Gly Arg Ala Lys Asp Arg
 50 55 60
 Glu Ile Ala Thr Leu Gln Glu Gln Leu Met Thr Ser Glu Ala Thr Val
 65 70 75 80
 His Ser Leu Gln Ala Thr Val His Gln Arg Asp Glu Leu Ile Arg Gln
 85 90 95
 Leu Gln Pro Arg Ala Glu Leu Leu Gln Asp Ile Cys Arg Arg Arg Pro
 100 105 110
 Pro Leu Ala Gly Leu Leu Asp Ala Leu Ala Glu Ala Glu Arg Leu Gly
 115 120 125
 Pro Leu Pro Ala Ser Asp Pro Gly His Pro Pro Pro Gly Gly Pro Gly
 130 135 140
 Pro Pro Leu Asp Asn Ser Thr Gly Glu Glu Ala Asp Arg Asp His Leu
 145 150 155 160
 Gln Pro Ala Val Phe Gly Thr Thr Val
 165

<210> 4004

<211> 266

<212> PRT

<213> Homo sapiens

<400> 4004

Met Met Ala Leu Trp Ser Leu Leu His Leu Thr Phe Leu Gly Phe Ser
 1 5 10 15
 Ile Thr Leu Leu Leu Val His Gly Gln Gly Phe Gln Gly Thr Ala Ala
 20 25 30
 Ile Trp Pro Ser Leu Phe Asn Val Asn Leu Ser Lys Lys Val Gln Glu
 35 40 45
 Ser Ile Gln Ile Pro Asn Asn Gly Ser Ala Pro Leu Leu Val Asp Val
 50 55 60
 Arg Val Phe Val Ser Asn Val Phe Asn Val Asp Ile Leu Arg Tyr Thr
 65 70 75 80

Met Ser Ser Met Leu Leu Leu Arg Leu Ser Trp Leu Asp Thr Arg Leu
 85 90 95
 Ala Trp Asn Thr Ser Ala His Pro Arg His Ala Ile Thr Leu Pro Trp
 100 105 110
 Glu Ser Leu Trp Thr Pro Arg Leu Thr Ile Leu Glu Ala Leu Trp Val
 115 120 125
 Asp Trp Arg Asp Gln Ser Pro Gln Ala Arg Val Asp Gln Asp Gly His
 130 135 140
 Val Lys Leu Asn Leu Ala Leu Thr Thr Glu Thr Asn Cys Asn Phe Glu
 145 150 155 160
 Leu Leu His Phe Pro Arg Asp His Ser Asn Cys Ser Leu Ser Phe Tyr
 165 170 175
 Ala Leu Ser Asn Thr Gly Ala Asp Arg Ala Gly Ala Ala Gly Leu Arg
 180 185 190
 Arg Gly Gly Gly Arg Trp Gly Arg Gly Thr Pro Arg Ser Val Val Gln
 195 200 205
 Gly Gln Gly Ala Gly Gln Gly Glu Gly Ala Lys Ala Asp Arg Arg Arg
 210 215 220
 Thr Pro Arg Ser Val Phe Arg Ala Val Tyr Pro Arg Leu Arg Arg Ala
 225 230 235 240
 Ala Pro Ala Leu Pro Leu Arg Pro Pro Leu Glu Trp Gln Pro Ile Ser
 245 250 255
 Val Leu Ser Gly Ser Leu Arg Ala Pro Leu
 260 265

<210> 4005

<211> 519

<212> PRT

<213> Homo sapiens

<400> 4005

Met Asp Trp Thr Trp Arg Phe Leu Phe Val Val Ala Ala Ala Thr Gly
 1 5 10 15
 Val Gln Ser Gln Val Gln Val Val Gln Ser Gly Ala Glu Val Lys Lys
 20 25 30

Pro Gly Ser Ser Val Lys Leu Ser Cys Lys Ala Pro Gly Val Thr Leu
 35 40 45
 Thr Ser Tyr Ser Leu Thr Trp Val Arg Gln Ala Pro Gly Gln Gly Leu
 50 55 60
 Glu Trp Met Gly Arg Ile Val Pro Thr Val Gly Ile Ala Thr Ile Gly
 65 70 75 80
 Gln Asn Phe Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Arg
 85 90 95
 Thr Ala Tyr Leu Glu Val Asn Ser Leu Gly Ser Glu Asp Thr Ala Thr
 100 105 110
 Tyr Tyr Cys Ala Ser Gly Gln Asp Val Asp Phe Arg Arg Gly Val Ala
 115 120 125
 Phe Glu Met Trp Gly Gln Gly Thr Met Val Ile Val Ser Ser Ala Ser
 130 135 140
 Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr
 145 150 155 160
 Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro
 165 170 175
 Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val
 180 185 190
 His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser
 195 200 205
 Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Thr
 210 215 220
 Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys Arg Val
 225 230 235 240
 Glu Leu Lys Thr Pro Leu Gly Asp Thr Thr His Thr Cys Pro Arg Cys
 245 250 255
 Pro Glu Pro Lys Ser Cys Asp Thr Pro Pro Pro Cys Pro Arg Cys Pro
 260 265 270
 Glu Pro Lys Ser Cys Asp Thr Pro Pro Pro Cys Pro Arg Cys Pro Glu
 275 280 285
 Pro Lys Ser Cys Asp Thr Pro Pro Pro Cys Pro Arg Cys Pro Ala Pro
 290 295 300
 Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys
 305 310 315 320

Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys	Val	Val	Val			
				325							330			335				
Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val	Gln	Phe	Lys	Trp	Tyr	Val	Asp			
				340							345			350				
Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	Lys	Leu	Arg	Glu	Glu	Gln	Tyr			
				355							360			365				
Asn	Ser	Thr	Phe	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu	His	Gln	Asp			
				370							375			380				
Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn	Lys	Ala	Leu			
385							390							395			400	
Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly	Gln	Pro	Arg			
				405							410			415				
Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Glu	Glu	Met	Thr	Lys			
				420							425			430				
Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu	Val	Lys	Gly	Phe	Tyr	Pro	Ser	Asp			
				435							440			445				
Ile	Ala	Val	Glu	Trp	Glu	Ser	Asn	Gly	Gln	Pro	Glu	Asn	Asn	Tyr	Asn			
				450							455			460				
Thr	Thr	Pro	Pro	Met	Leu	Asp	Ser	Asp	Gly	Ser	Phe	Phe	Leu	Tyr	Ser			
465							470							475			480	
Lys	Leu	Thr	Val	Asp	Lys	Ser	Arg	Trp	Gln	Gln	Gly	Asn	Ile	Phe	Ser			
				485							490			495				
Cys	Ser	Val	Met	His	Glu	Ala	Leu	His	Asn	Arg	Tyr	Thr	Gln	Lys	Ser			
				500							505			510				
Leu	Ser	Leu	Ser	Pro	Gly	Lys												
515																		

<210> 4006

<211> 186

<212> PRT

<213> Homo sapiens

<400> 4006

Met Ser Lys Ala Gln Cys Ile Val Ala Asn Glu Ala Met Ala Pro Val

1

5

10

15

Val	Asn	Ser	Ala	Val	Ser	Asp	Cys	Pro	Thr	Leu	Lys	Thr	Lys	Leu	Leu
20				25				30							
Val	Ser	Asp	Lys	Ser	Tyr	Asp	Gly	Trp	Leu	Asp	Phe	Lys	Lys	Leu	Ile
35				40				45							
Gln	Val	Ala	Pro	Pro	Lys	Gln	Thr	Tyr	Met	Arg	Thr	Lys	Ser	Gln	Asp
50				55				60							
Pro	Met	Ala	Ile	Phe	Phe	Thr	Lys	Gly	Thr	Thr	Gly	Ala	Pro	Lys	Met
65				70				75				80			
Val	Glu	Tyr	Ser	Gln	Tyr	Gly	Leu	Gly	Met	Gly	Phe	Ser	Gln	Ala	Ser
85				90				95							
Arg	Arg	Trp	Met	Asp	Leu	Gln	Pro	Thr	Asp	Val	Leu	Trp	Ser	Leu	Gly
100				105				110							
Asp	Ala	Phe	Gly	Gly	Ser	Leu	Ser	Leu	Ser	Ala	Val	Leu	Gly	Thr	Trp
115				120				125							
Phe	Gln	Gly	Ala	Cys	Val	Phe	Leu	Cys	His	Met	Pro	Thr	Phe	Cys	Pro
130				135				140							
Glu	Thr	Val	Leu	Asn	Val	Leu	Ser	Arg	Phe	Pro	Ile	Thr	Thr	Leu	Ser
145				150				155				160			
Ala	Asn	Pro	Glu	Met	Tyr	Gln	Glu	Leu	Leu	Gln	His	Lys	Cys	Phe	Thr
165				170				175							
Arg	Val	Tyr	Ser	Val	Pro	Leu	Pro	Lys	Gln						
180				185											

<210> 4007

<211> 119

<212> PRT

<213> Homo sapiens

<400> 4007

Met Glu Glu Val Ile Phe Glu Glu Arg Ser Glu Glu Gly Lys Gly Val
1 5 10 15
Gly Thr Glu Asp Ile Gly Gly Thr Val Leu Pro Glu Thr Ser Gly Gln
20 25 30
Pro Gly Thr Gly Thr Thr Ser Arg Lys Gly Ser Cys Glu Gly Phe Val
35 40 45

Phe Ser Leu Gln Phe Val Asn Val Asn Thr Met Leu Thr Pro Lys Asn
 50 55 60
 Ser Lys Phe Pro Thr Trp Leu Leu Cys Leu Pro Pro Ser Phe Pro Pro
 65 70 75 80
 Phe Leu Pro Pro Ser Phe Leu Ser Ser Phe Leu Pro Ser Val Leu Pro
 85 90 95
 Phe Phe Pro Ile Cys Pro Thr Ser Met Asp Glu Phe Ser Ser Ser Leu
 100 105 110
 Gly Cys Phe Leu His Cys Thr
 115

<210> 4008

<211> 219

<212> PRT

<213> Homo sapiens

<400> 4008

Met Gly Pro Leu Ser Pro Tyr Ala Trp Ala Phe Ser His Thr Val Glu
 1 5 10 15
 Cys Ile Phe Ile Phe Asn Lys Ser Leu His Ala Phe Leu Ala Leu Cys
 20 25 30
 Val Leu Ser Asn Ser Leu Leu Lys Thr Ser Arg Thr Trp Thr Pro Thr
 35 40 45
 Thr Gly Asn Val Tyr Phe Gly Gln Pro Gly Gly Arg Ser Lys Pro Lys
 50 55 60
 Val Trp Asp Ser Phe Phe Ser Leu Ser Phe Leu Leu His Thr Arg Ala
 65 70 75 80
 Phe Ser Phe His Phe Gln Leu Gly Thr Leu Gly Gly Gln His Leu Asn
 85 90 95
 Val Glu Ala Thr Ala Gly Phe Trp Leu Trp Pro Val Lys Leu Met Gly
 100 105 110
 Phe Arg Ala Glu Lys Ala Asp Cys His Leu Leu Val Cys Leu Arg Asn
 115 120 125
 Leu Gly Leu Phe His Phe Phe Phe Leu Tyr Phe Ser Val Phe Lys Ser
 130 135 140

Leu Phe Ile Ile Ala Leu Pro Arg Arg Gly Asn Asp Phe Phe Phe Tyr
 145 150 155 160
 Leu Phe Cys Thr Trp Ser Pro Ile Pro Met Cys Gly Ala Val Gln Ser
 165 170 175
 Lys Leu Ala His Val Leu Arg Asp Leu Asn Leu Leu Met Leu Asn Ser
 180 185 190
 Ser Leu Thr Val Leu Asn Trp Leu Arg Asn Lys Lys Ala His Pro Ala
 195 200 205
 Ser Ser Ser His Cys Ser Ser Trp Leu Phe Leu
 210 215

<210> 4009

<211> 107

<212> PRT

<213> Homo sapiens

<400> 4009

Met Ala Leu Gly Phe Pro Gly Leu Gly Gly Gly Ser Cys Gly Arg
 1 5 10 15
 Gln Glu Gly Gly Arg Tyr Ser Phe Pro Arg Ala His Ala Gly Leu Ala
 20 25 30
 Gln Ala Gly Trp Ala Ser Pro Ser Leu Ser Ala Gly Ser Arg His Cys
 35 40 45
 Pro His Pro Val Thr Pro Leu Gln Leu Phe Phe Leu Phe Pro Thr Ala
 50 55 60
 Ser Leu Val Asp Ala Pro Ser Glu Gln Pro Cys Thr Glu Pro Arg Ala
 65 70 75 80
 Gly Pro Gly Arg Cys Thr Leu Ala Leu Gly Asp Ser Ser Phe Thr Glu
 85 90 95
 Thr Thr Ile Ile Leu Trp Phe Gln Gly Gly Asn
 100 105

<210> 4010

<211> 128

<212> PRT

<213> Homo sapiens

<400> 4010

```

Met Tyr Ile Gln Phe Cys Ile Thr Leu Phe Ser Phe Ser Phe Phe Phe
  1             5             10             15
Phe Phe Phe Phe Cys Phe Leu Arg Gln Gly Leu Pro Leu Ser Leu Arg
      20             25             30
Leu Gln Cys Ser Gly Thr Ile Leu Ala His Cys Asn Leu Arg Phe Leu
      35             40             45
Gly Ser Asn Asp Pro Pro Thr Ser Ala Ser Gln Val Ala Trp Thr Thr
      50             55             60
Gly Val His His His Ile Ser Leu Ile Phe Val Phe Val Glu Met Arg
      65             70             75             80
Phe Cys Cys Val Ala Gln Val Gly Leu Glu Tyr Leu Gly Ser Ser Glu
      85             90             95
Leu Ser Ala Leu Asp Ser Gln Ser Ala Gly Ile Thr Gly Val Ser Gln
      100            105            110
Cys Ala Trp Pro Ala Leu Cys Phe Phe Ser Phe Ala Val Ala Cys Tyr
      115            120            125

```

<210> 4011

<211> 167

<212> PRT

<213> Homo sapiens

<400> 4011

```

Met Gly Pro Val Cys Arg Gly Ser Ser Gly Pro Leu Arg Val Ala Gly
  1             5             10             15
Gly Ser Trp Thr Cys Leu Gly Gly Gln Thr Pro Gly Arg Gly Gln Leu
      20             25             30
Arg Arg Ser Ala Ser Asp Phe Ser Gly His Leu Gly Ser Pro Ile Pro
      35             40             45
Ile Ala Pro Gly Leu Asp Pro Leu Pro Val Leu Ser Thr Phe Ser Val
      50             55             60

```

Thr Leu Asn Ala Leu Pro Ala Ile Ser Ala Ser Gly Arg Ile His Glu
 65 70 75 80
 Gly Val Gly Arg Asp Val Arg Pro Gly Phe Gly Ser Gln Leu Ser His
 85 90 95
 Leu Ile Ala Met Arg Pro Cys Thr Ile Pro Phe Asn Phe Pro Ser Leu
 100 105 110
 Ser Phe Phe Leu Cys Lys Met Gly Ile Gln Arg Asp Ser Leu Leu Ala
 115 120 125
 Arg Asp Ser Trp Cys Leu Ile Arg Leu Lys Leu Pro Tyr Leu Gln Ser
 130 135 140
 Lys Lys Pro Cys Asp Glu Lys Leu Phe Cys Gln Tyr Ala Ala Asn Ser
 145 150 155 160
 Phe Gly Pro Gln Asn Leu Thr
 165

<210> 4012

<211> 534

<212> PRT

<213> Homo sapiens

<400> 4012

Met Glu Phe Gly Val Phe Pro Met Glu Ala Thr His Ser Ser Ile Asp
 1 5 10 15
 Glu Glu Gly Tyr Ile Gln Gly Ser Gln Arg Asp Arg Gly Ser Ser Leu
 20 25 30
 Val Asp Thr Glu Glu Ala Lys Thr Lys Ser Glu Asn Val Leu His Asp
 35 40 45
 Gln Ala Ala Lys Val Asp Lys Asp Asp Gly Lys Glu Thr Gly Glu Thr
 50 55 60
 Phe Thr Phe Lys Arg His Ser Gln Asp Ala Ser Gln Asp Val Lys Leu
 65 70 75 80
 Tyr Ser Asp Thr Ala Pro Thr Glu Asp Leu Ile Glu Glu Val Thr Ala
 85 90 95
 Asp His Pro Glu Val Val Thr Met Ile Glu Glu Thr Ile Lys Met Ser
 100 105 110

Gln Asp Ile Asn Phe Glu Gln Pro Tyr Glu Lys His Ala Glu Ile Leu
 115 120 125
 Gln Glu Val Leu Gly Glu Val Met Glu Glu Asn Lys Asp Arg Phe Pro
 130 135 140
 Gly Ala Pro Lys Tyr Gly Gly Trp Ile Val Asp Asn Cys Pro Ile Val
 145 150 155 160
 Lys Glu Leu Trp Met Ala Leu Ile Lys Lys Gly Ile Ile Pro Asp Leu
 165 170 175
 Val Ile Tyr Leu Ser Asp Thr Glu Asn Asn Gly Lys Cys Leu Phe Asn
 180 185 190
 Arg Ile Tyr Leu Gln Lys Lys Ser Glu Ile Asp Ser Lys Ile Leu Glu
 195 200 205
 Arg Leu Leu Glu Glu Leu Gln Lys Lys Lys Lys Glu Glu Glu Glu Ala
 210 215 220
 Arg Lys Ala Thr Glu Glu Glu Leu Arg Leu Glu Glu Glu Asn Arg Arg
 225 230 235 240
 Leu Leu Glu Leu Met Lys Val Lys Ala Lys Glu Ala Glu Glu Thr Asp
 245 250 255
 Asn Glu Val Glu Glu Glu Ile Glu Gly Asp Glu Leu Glu Val His Glu
 260 265 270
 Glu Pro Glu Ala Ser His Asp Thr Arg Gly Ser Trp Leu Pro Glu Glu
 275 280 285
 Phe Glu Ala Ser Glu Val Pro Glu Thr Glu Pro Glu Ala Val Ser Glu
 290 295 300
 Pro Ile Glu Glu Thr Thr Val Glu Thr Glu Ile Pro Lys Gly Ser Lys
 305 310 315 320
 Glu Gly Leu Glu Ile Glu Lys Leu Ser Glu Thr Val Val Leu Pro Glu
 325 330 335
 Phe Pro Glu Asp Ser Tyr Pro Asp Val Pro Glu Met Glu Pro Phe Lys
 340 345 350
 Glu Lys Ile Gly Ser Phe Ile Ile Leu Trp Lys Gln Leu Glu Ala Thr
 355 360 365
 Ile Ser Glu Ala Tyr Ile Lys Ile Leu Asn Leu Glu Ile Ala Asp Arg
 370 375 380
 Thr Pro Gln Glu Leu Leu Gln Lys Val Val Glu Thr Met Glu Lys Pro
 385 390 395 400

Phe Gln Tyr Thr Ala Trp Glu Leu Thr Gly Glu Asp Tyr Glu Glu Glu
 405 410 415
 Thr Glu Asp Tyr Gln Thr Glu Ala Glu Val Asp Glu Glu Leu Glu Glu
 420 425 430
 Glu Glu Glu Glu Glu Gly Glu Asp Lys Met Lys Glu Arg Lys Arg His
 435 440 445
 Leu Gly Asp Thr Lys His Phe Cys Pro Val Val Leu Lys Glu Asn Phe
 450 455 460
 Ile Leu Gln Pro Gly Asn Thr Glu Glu Ala Ala Lys Tyr Arg Glu Lys
 465 470 475 480
 Ile Tyr Tyr Phe Ser Ser Ala Glu Ala Lys Glu Lys Phe Leu Glu His
 485 490 495
 Pro Glu Asp Tyr Val Ala His Glu Glu Pro Leu Lys Val Arg Gln Tyr
 500 505 510
 Ser Tyr Leu Asn Asp Cys Ser His Arg Ile Phe Leu Gly Leu Ile Thr
 515 520 525
 Asn His His Gln Phe Thr
 530

<210> 4013

<211> 572

<212> PRT

<213> Homo sapiens

<400> 4013

Met Ala Ser Ser Glu Thr Glu Ile Arg Trp Ala Glu Pro Gly Leu Gly
 1 5 10 15
 Lys Gly Pro Gln Arg Arg Arg Trp Ala Trp Ala Glu Asp Lys Arg Asp
 20 25 30
 Val Asp Arg Ser Ser Ser Gln Ser Trp Glu Glu Glu Arg Leu Phe Pro
 35 40 45
 Asn Ala Thr Ser Pro Glu Leu Leu Glu Asp Phe Arg Leu Ala Gln Gln
 50 55 60
 His Leu Pro Pro Leu Glu Trp Asp Pro His Pro Gln Pro Asp Gly His
 65 70 75 80

Gln Asp Ser Glu Ser Gly Glu Thr Ser Gly Glu Glu Ala Glu Ala Glu
 85 90 95
 Asp Val Asp Ser Pro Ala Ser Ser His Glu Pro Leu Ala Trp Leu Pro
 100 105 110
 Gln Gln Gly Arg Gln Leu Asp Met Thr Glu Glu Glu Pro Asp Gly Thr
 115 120 125
 Leu Gly Ser Leu Glu Val Glu Glu Ala Gly Glu Ser Ser Ser Arg Leu
 130 135 140
 Gly Tyr Glu Ala Gly Leu Ser Leu Glu Gly His Gly Asn Thr Ser Pro
 145 150 155 160
 Met Ala Leu Gly His Gly Gln Ala Arg Gly Trp Val Ala Ser Gly Glu
 165 170 175
 Gln Ala Ser Gly Asp Lys Leu Ser Glu His Ser Glu Val Asn Pro Ser
 180 185 190
 Val Glu Leu Ser Pro Ala Arg Ser Trp Ser Ser Gly Thr Val Ser Leu
 195 200 205
 Asp His Pro Ser Asp Ser Leu Asp Ser Thr Trp Glu Gly Glu Thr Asp
 210 215 220
 Gly Pro Gln Pro Thr Ala Leu Ala Glu Thr Leu Pro Glu Gly Pro Ser
 225 230 235 240
 His His Leu Leu Ser Pro Asp Gly Arg Thr Gly Gly Ser Val Ala Arg
 245 250 255
 Ala Thr Pro Met Glu Phe Gln Asp Ser Ser Ala Pro Pro Ala Gln Ser
 260 265 270
 Pro Gln His Ala Thr Asp Arg Trp Arg Arg Glu Thr Thr Arg Phe Phe
 275 280 285
 Cys Pro Gln Pro Lys Glu His Ile Trp Lys Gln Thr Lys Thr Ser Pro
 290 295 300
 Lys Pro Leu Pro Ser Arg Phe Ile Gly Ser Ile Ser Pro Leu Asn Pro
 305 310 315 320
 Gln Pro Arg Pro Thr Arg Gln Gly Arg Pro Leu Pro Arg Gln Gly Ala
 325 330 335
 Thr Leu Ala Gly Arg Ser Ser Ser Asn Ala Pro Lys Tyr Gly Arg Gly
 340 345 350
 Gln Leu Asn Tyr Pro Leu Pro Asp Phe Ser Lys Val Gly Pro Arg Val

355	360	365
Arg Phe Pro Lys Asp Glu Ser Tyr Arg Pro Pro Lys Ser Arg Ser His		
370	375	380
Asn Arg Lys Pro Gln Ala Pro Ala Arg Pro Leu Ile Phe Lys Ser Pro		
385	390	395
Ala Glu Ile Val Gln Glu Val Leu Leu Ser Ser Gly Glu Ala Ala Leu		
405	410	415
Ala Lys Asp Thr Pro Pro Ala His Pro Ile Thr Arg Val Pro Gln Glu		
420	425	430
Phe Gln Thr Pro Glu Gln Ala Thr Glu Leu Val His Gln Leu Gln Val		
435	440	445
Ser Gly Thr His Gly Cys Gly Cys Val Thr Lys Ala Pro Val Gly Leu		
450	455	460
Gly Trp Arg Leu Ile Gly Val Gly Arg Pro Gly Val Glu Ala Gly Trp		
465	470	475
Gly Gly Glu Ala Trp Asp Arg Ala Trp Leu Gly Trp Glu Ala Leu Gly		
485	490	495
Arg Arg Leu Val Gly Trp Gly Gly Leu Gly Trp Arg Leu Ala Arg Val		
500	505	510
Gly Ser Pro Gly Met Glu Ala Ser Gly Val Gly Arg Pro Gly Val Gly		
515	520	525
Ser Pro Gly Val Glu Pro Gly Gly Val Gly Arg Pro Gly Val Glu Ala		
530	535	540
Gly Trp Gly Arg Lys Pro Trp Asp Arg Gly Trp Trp Gly Gly Glu Ala		
545	550	555
Trp Gly Gly Gly Trp Leu Gly Gln Glu Ala Leu Gly		
565	570	

<210> 4014

<211> 104

<212> PRT

<213> Homo sapiens

<400> 4014

Met Ser Met Gln Arg Leu Ala Pro Lys Lys Thr Arg Lys Glu Gln Ser

1 5 10 15
 Ala Asn Asp His Pro Ile Gly Gly Pro Glu Gly Arg Leu Phe Thr Ser
 20 25 30
 Gln Leu Gln Leu Lys Phe Arg Ala Leu Ser Glu Arg Asn Ser Trp Leu
 35 40 45
 Glu Val Ser Arg Ala Val Thr Pro Thr Ser Ala Ala Val Thr Ser Thr
 50 55 60
 Pro Ser Thr Ser Lys Pro Arg Gln Lys Arg Pro Thr Asn Ser Gln Ser
 65 70 75 80
 Arg Ser Ala Ala Lys Pro Thr Pro Val Val Phe Leu Gln Lys Ile Ile
 85 90 95
 Asn Cys Gly Glu Glu Glu Gly Lys
 100

<210> 4015

<211> 226

<212> PRT

<213> Homo sapiens

<400> 4015

Met Gly Phe Cys Tyr Val Ala Gln Ala Gly Leu Lys Leu Leu Gly Ser
 1 5 10 15
 Ser Asp Leu Pro Thr Leu Ala Ser Gln Ser Ala Arg Ile Thr Gly Met
 20 25 30
 Ser His Trp Ala Trp Pro Ser Leu Phe Ser Tyr Phe Leu Gly Thr Cys
 35 40 45
 Arg Pro Glu Ile His Met His Leu Ser Leu Leu Pro Asp Arg Arg Thr
 50 55 60
 His Trp Asn Val Gly Ile Asp Phe Thr Ala Ser Asn Gly Asn Pro Leu
 65 70 75 80
 Asp Pro Ser Ser Leu His Tyr Ile Asn Pro Met Gly Thr Asn Glu Tyr
 85 90 95
 Leu Ser Ala Ile Trp Ala Val Gly Gln Ile Ile Gln Asp Tyr Asp Ser
 100 105 110
 Asp Lys Met Phe Pro Ala Leu Gly Phe Gly Ala Gln Leu Pro Pro Asp

115	120	125
Trp Lys Gln Tyr Phe Ile Leu Leu Ile Ile Thr Asp Gly Val Ile Ser		
130	135	140
Asp Met Glu Glu Thr Arg His Ala Val Val Gln Ala Ser Lys Leu Pro		
145	150	155
Met Ser Ile Ile Ile Val Gly Val Gly Asn Ala Asp Phe Ala Ala Met		
165	170	175
Glu Phe Leu Asp Gly Asp Ser Arg Met Leu Arg Ser His Thr Gly Glu		
180	185	190
Glu Ala Ala Arg Asp Ile Val Gln Phe Val Pro Phe Arg Glu Phe Arg		
195	200	205
Asn Val Ser Val Gly Leu Gly Trp Glu Gly Ala Val Thr Gly Ser Gln		
210	215	220
Pro Pro		
225		

<210> 4016

<211> 120

<212> PRT

<213> Homo sapiens

<400> 4016

Met Gly Arg Arg Asp Gly Asp Glu Arg Ser Cys Ser Gly Leu Gly Thr		
1	5	10
Pro Lys Ala Ala Asp Ser Ile Trp Leu Ser Val Pro Gln Ser Pro Leu		
20	25	30
Leu Cys Thr Lys Phe Thr Val Leu Ala Leu Lys Ser Asn Phe Glu Phe		
35	40	45
Ser Lys Asp Val Cys Ile Ala His Ala Asn Glu Leu Ser Val His Trp		
50	55	60
Asn Asp Thr Ile Thr Thr Gln Met Lys Arg Thr Gly Trp Asn Ile His		
65	70	75
Gln Pro Thr Asn Val Ile Ser Gln Pro Thr Leu Gln Thr Pro Ser Gln		
85	90	95
Lys Ser Ile Gln Phe Arg Ile Ala His Cys Trp Gln Arg Lys Asn Val		

100 105 110
 Thr Asn Leu Phe Thr Gly Glu Tyr
 115 120

<210> 4017

<211> 184

<212> PRT

<213> Homo sapiens

<400> 4017

Met Thr Ser Cys Ser Met Ala Pro Ser Thr Pro Ser Ser Ser Ser Gly
 1 5 10 15
 Ala Lys Ala Trp Arg Arg Ser Pro Glu Ala Pro Ser Pro Trp Ser Cys
 20 25 30
 Ser Ser Glu Cys Arg His Asn Glu Ala Tyr Thr Trp Thr Asn Pro Thr
 35 40 45
 Cys Cys Val His Asn Val Ile Ile Gly Lys Leu Trp Ile Glu Gln Tyr
 50 55 60
 Gly Thr Val Glu Ile Leu Asn His Arg Thr Gly His Lys Cys Val Leu
 65 70 75 80
 His Phe Lys Pro Cys Gly Leu Phe Gly Lys Glu Leu His Lys Val Glu
 85 90 95
 Gly His Ile Gln Asp Lys Asn Lys Lys Lys Leu Phe Met Ile Tyr Gly
 100 105 110
 Lys Trp Thr Glu Cys Leu Trp Gly Ile Asp Pro Val Ser Tyr Glu Ser
 115 120 125
 Phe Lys Lys Gln Glu Arg Arg Gly Asp His Leu Arg Lys Ala Lys Leu
 130 135 140
 Val Arg Ala Gly Ala Ser Pro Gly Arg Ala Glu Pro Trp Val Leu Arg
 145 150 155 160
 Ala Ala Arg Pro Leu Leu Pro Leu Ala His Leu Leu Gly Ser Gln Gly
 165 170 175
 Thr Phe Gly Pro His Gln Glu Arg
 180

<210> 4018

<211> 108

<212> PRT

<213> Homo sapiens

<400> 4018

```

Met Ser Thr Ser Leu Leu Ile Cys Lys Ser Arg Ser Cys Phe Leu Val
  1              5              10              15
Tyr Leu Ala Cys Val Tyr Leu Tyr Gly Val Ala Arg Arg Asp His Arg
      20              25              30
Asn Ala Cys Ser Leu Arg Gln Gly Phe Gln Thr Val Gly Pro Ser Pro
      35              40              45
Phe Ser Lys Met Gly Asn Gln Leu Ala Ser Gly His Gln His Tyr Thr
      50              55              60
Ala Met Lys Gln Asn Lys Val Gly Gln Asn Ala Ser Cys Ser Lys Gly
      65              70              75              80
Lys Tyr Cys Phe Val Lys Leu Phe Thr His Thr Ser Lys Cys Glu Asn
      85              90              95
Trp Leu Gln Cys Lys Thr Phe Leu Ala Gly Lys Leu
      100              105

```

<210> 4019

<211> 107

<212> PRT

<213> Homo sapiens

<400> 4019

```

Met Ile Ser Lys Arg Phe Leu Ser Lys Ala Asp Leu Leu Leu Gln Asn
  1              5              10              15
Gly Ala Ala Cys Thr Pro Gly His Ser Glu Ser Thr Pro Asn Lys Gly
      20              25              30
Gly Glu Val Val Phe Ile Pro Asn Thr Ala Ser Ser Cys Phe Cys Val
      35              40              45
Leu Ser Pro Leu Ala Arg Val Gln Ser Lys Leu Val Leu Ile Gly Tyr

```

50 55 60
 Phe Lys Gln Glu Gly Cys Gly Leu Gln Gln Trp Glu Glu Gln Leu Pro
 65 70 75 80
 Arg Ala Arg Glu Thr Phe Pro Asp Lys Glu Gln Met Arg Val Thr Gly
 85 90 95
 Trp Asp Trp Trp Glu Lys Cys Leu Gln Asn Gly
 100 105

<210> 4020

<211> 106

<212> PRT

<213> Homo sapiens

<400> 4020

Met Lys Glu Ile Val Asp Val Thr Arg Val Arg Asn Glu Gly Phe Gln
 1 5 10 15
 Asp Lys Asn Leu Gly Glu Ile Gln Gln Leu Ile Gly Thr Thr Thr Glu
 20 25 30
 Glu Leu Thr Glu Asp Asp Leu Thr Glu Met Ser Val Leu Lys Pro Met
 35 40 45
 Pro Asp Asn Glu Glu Lys Glu Ile Glu Ala Ala Val Pro Glu Asn Lys
 50 55 60
 Met Thr Leu Asp Asn Leu Ala Ala Glu Phe Pro Leu Phe Lys Thr Ser
 65 70 75 80
 Phe Asp Phe Phe Tyr Asp Met Asp Ser Ser Met Gly Thr Glu Thr Lys
 85 90 95
 Ala Asn Gly Glu Arg Arg Ile Gly Thr Ile
 100 105

<210> 4021

<211> 115

<212> PRT

<213> Homo sapiens

<400> 4021

Met Gly Leu Arg Trp Ser Arg Arg Leu Trp Pro Val Val Val His Ser
 1 5 10 15
 Trp Val Pro Ala Ser Gly Gly Thr His Cys Thr Tyr Gln Gly Ser Pro
 20 25 30
 Ser His Leu Leu Thr Gln Ala Leu Gly Leu Thr Gly Pro Pro Pro Ala
 35 40 45
 Ser Leu Ala Ala Phe Leu Ser Pro Trp Glu Ala Glu Pro Pro Ser Asp
 50 55 60
 Pro Leu Ser Pro Glu Ser Thr Ile Ala Leu Phe Ser Leu Asn Val Leu
 65 70 75 80
 Ile Phe Glu Met Ala Ala Ser Gly Pro Ser Glu Gly Arg Met Arg Glu
 85 90 95
 Asn Val Gly Gln Thr Arg Leu Glu Val Pro Cys Cys Asn Glu Val Cys
 100 105 110
 Ser Pro Thr
 115

<210> 4022

<211> 114

<212> PRT

<213> Homo sapiens

<400> 4022

Met Leu Leu Asn Glu Lys Trp Leu Pro Tyr Pro Glu Val Pro Ser Pro
 1 5 10 15
 Phe Leu Leu Gly Leu Thr Leu Ala His Gln Glu Leu Gly Cys Ser Pro
 20 25 30
 Val Asn Arg Thr Ser Met Gln Val Trp Asn Leu Ala Asn Cys Lys Leu
 35 40 45
 Lys Thr Asn His Ile Gly His Thr Gly Tyr Leu Asn Thr Val Thr Val
 50 55 60
 Ser Pro Asp Gly Ser Leu Cys Ala Ser Gly Gly Lys Val Phe Gly Asp
 65 70 75 80

Lys Ala Ser Pro Thr Gln Trp Lys Thr Ala Ser Trp Lys Glu His Leu
 85 90 95
 Ala Ser Val Ser Asn Val Lys Trp Gln Thr Leu Ala Lys Met Val Leu
 100 105 110
 Gly Gly

<210> 4023

<211> 163

<212> PRT

<213> Homo sapiens

<400> 4023

Met Ser Thr Thr Ser Ile Ser Ser Pro Gln Pro Gly Lys Leu Arg Ser
 1 5 10 15
 Pro Phe Leu Gln Lys Gln Leu Thr Gln Pro Glu Thr His Phe Gly Arg
 20 25 30
 Glu Pro Ala Ala Ala Ile Ser Arg Pro Arg Ala Asp Leu Pro Ala Glu
 35 40 45
 Glu Pro Ala Pro Ser Thr Pro Pro Cys Leu Val Gln Ala Glu Glu Glu
 50 55 60
 Ala Val Tyr Glu Glu Pro Pro Glu Gln Glu Thr Phe Tyr Glu Gln Pro
 65 70 75 80
 Pro Leu Val Gln Gln Gln Gly Ala Gly Ser Glu His Ile Asp His His
 85 90 95
 Ile Gln Gly Gln Gly Leu Ser Gly Gln Gly Leu Cys Ala Arg Ala Leu
 100 105 110
 Tyr Asp Tyr Gln Ala Ala Asp Asp Thr Glu Ile Ser Phe Asp Pro Glu
 115 120 125
 Asn Leu Ile Thr Gly Ile Glu Val Ile Asp Glu Gly Trp Trp Arg Gly
 130 135 140
 Tyr Gly Pro Asp Gly His Phe Gly Met Phe Pro Ala Asn Tyr Val Glu
 145 150 155 160
 Leu Ile Glu

<210> 4024

<211> 115

<212> PRT

<213> Homo sapiens

<400> 4024

```

Met Met Met Cys Val Met Ser Arg Leu Ser Val Pro Thr Asn Ser Tyr
  1             5             10             15
Glu Met Glu Pro Leu Gly Gln Ser Ser Glu Leu Val Leu Leu Leu Phe
      20             25             30
Leu Asp Lys Gly Leu Leu Leu Leu Ile Leu Ser Ile Asp Arg Asn Gln
      35             40             45
Glu Glu Asn Thr Phe Thr Arg Leu Ile Ile Thr Tyr Lys Val Leu Gln
      50             55             60
Ala Val Leu Met Cys Ser Ser Glu Asp Ile Ser Gly Thr Ala Ala Met
      65             70             75             80
Ile Glu Pro Thr Tyr Trp Leu Ser Leu Leu Lys Cys Ile Val Ile His
      85             90             95
Leu Asn Leu Phe Val Trp Gly Phe Cys Trp Phe Cys Phe Leu Gln Gly
      100            105            110
Ala Asp Arg
      115

```

<210> 4025

<211> 102

<212> PRT

<213> Homo sapiens

<400> 4025

```

Met Ile Ser Ala His Cys Asn Leu Arg Leu Ser Gly Ser Ser Asp Ser
  1             5             10             15
Pro Ala Ser Gly Ser Arg Val Ala Gly Ile Ala Asp Lys Tyr Ala Glu

```

20 25 30
 Ala Cys Phe Gln Gly Gly Glu Arg Asp Ser Phe Ser Ser Ala Gly His
 35 40 45
 Arg Ala Asn Leu Lys Cys Ser Thr Val Val Thr Trp Arg Asp Leu Leu
 50 55 60
 Ser Ser His Ser Arg Gly Pro Phe Trp Gly Gln Gly Asp Phe Ser Val
 65 70 75 80
 Arg Pro Val Asp Leu Ile Glu Met Met Ser Cys His Ile Ala Gln Ala
 85 90 95
 Gly Leu Lys Leu Gln Ala
 100

<210> 4026

<211> 124

<212> PRT

<213> Homo sapiens

<400> 4026

Met Gln Ala Thr Cys Leu His Val Arg Gly Ser Leu Glu Ser Ser His
 1 5 10 15
 Arg Ala Thr Pro Trp Leu Gly Ser Ser Pro Ala Leu Leu Pro Pro Ser
 20 25 30
 Pro Ser Pro Ala Ala Ala Leu Ser Met Ala Glu Pro Leu Leu Pro Leu
 35 40 45
 Leu Glu Gly Arg Ser Thr Glu Gln Ile Gln Glu Arg Asn His Cys Val
 50 55 60
 Phe His Arg Arg Glu Ser Thr Leu Asp Phe Leu Cys Asn Leu Leu Leu
 65 70 75 80
 His Phe His Arg Asp Ser Tyr Leu Cys Ser Val Thr Gln Leu Lys Pro
 85 90 95
 Ser Lys Ile Arg Leu Pro Cys Leu His Lys Gly His His Asp Gly Asn
 100 105 110
 Gly Cys Thr Ser Pro Cys Val Trp Thr Glu Ala Asp
 115 120

<210> 4027

<211> 141

<212> PRT

<213> Homo sapiens

<400> 4027

```

Met Ile Ile Ile Val Arg Ile Ala Ile Ile Lys Lys Ser Arg Asn Asn
  1             5             10             15
Ser Cys Trp Cys Gly Cys Arg Lys Lys Arg Met His Val Tyr Cys Ser
          20             25             30
Trp Glu Gln Leu Val Gln Pro Leu Trp Lys Ala Val Trp Arg Phe Leu
      35             40             45
Lys Lys Leu Lys Ile Glu Leu Pro Phe Asn Pro Ala Ile Pro Leu Leu
      50             55             60
Gly Val Tyr Pro Lys Glu Asp Lys Ser Phe Tyr Glu Asn Ala Cys Ser
      65             70             75             80
Cys Val Phe Ile Ala Ala Leu Phe Thr Ile Ala Lys Ser Trp Ile Gln
          85             90             95
Pro Lys Cys Leu Ser Ala Val Val Trp Ile Lys Arg Met Trp Cys Ile
          100            105            110
His Thr Glu Ile Leu Cys Ser His Lys Asn Met Lys Leu Leu Ser Phe
          115            120            125
Ala Ala Thr Trp Met Lys Pro Glu Gly His Tyr Pro Lys
          130            135            140

```

<210> 4028

<211> 113

<212> PRT

<213> Homo sapiens

<400> 4028

```

Met Arg Tyr Gly Pro Gly Lys Glu Ala Ser Pro Arg Pro Leu Gln Ala
  1             5             10             15
Pro Arg Lys Val Ser Ile Glu Gly Arg Glu Leu Gly Lys Leu Ser Gln

```

	20		25		30
Gln Gly Trp Lys Glu Val Gly Asn Pro Phe Ser Gly Ser Leu Pro Val					
	35		40		45
Lys Leu Leu Ser Ser Gly Arg Ser Cys Pro Arg Tyr Arg Met Val Ser					
	50		55		60
Ser Val Cys Gln Ser Ser Thr Gln Asn Leu Gly Pro Cys Gln Ser Cys					
	65		70		75
Thr Lys Asp His Thr Val Leu Ser Ser Tyr Ser Val Val Val Phe Val					
	85		90		95
Thr Ile His Tyr Leu Ile Ile Phe Lys Tyr Thr Ser Cys Phe Ile Asp					
	100		105		110
Phe					

<210> 4029

<211> 360

<212> PRT

<213> Homo sapiens

<400> 4029

Met Gln Ile Ile Arg His Ser Glu Gln Thr Leu Lys Thr Ala Leu Ile				
1	5	10	15	
Ser Lys Asn Pro Val Leu Val Ser Gln Tyr Glu Lys Leu Asp Ala Gly				
	20	25	30	
Glu Gln Arg Leu Met Asn Glu Ala Phe Gln Pro Ala Ser Asp Leu Phe				
	35	40	45	
Gly Pro Ile Thr Leu His Ser Pro Ser Asp Trp Ile Thr Ser His Pro				
	50	55	60	
Glu Ala Pro Gln Asp Phe Glu Gln Phe Phe Ser Asp Pro Tyr Arg Lys				
	65	70	75	80
Thr Pro Ser Pro Asn Lys Arg Ser Ile Tyr Ile Gln Ser Ile Gly Ser				
	85	90	95	
Leu Gly Asn Thr Arg Ile Ile Ser Glu Glu Tyr Ile Lys Trp Leu Thr				
	100	105	110	
Gly Tyr Cys Lys Ala Tyr Phe Tyr Gly Leu Arg Val Lys Leu Leu Glu				

115	120	125
Pro Val Pro Val Ser Val Thr Arg Cys Ser Phe Arg Val Asn Glu Asn		
130	135	140
Thr His Asn Leu Gln Ile His Ala Gly Asp Ile Leu Lys Phe Leu Lys		
145	150	155
Lys Lys Lys Pro Glu Asp Ala Phe Cys Val Val Gly Ile Thr Met Ile		
165	170	175
Asp Leu Tyr Pro Arg Asp Ser Trp Asn Phe Val Phe Gly Gln Ala Ser		
180	185	190
Leu Thr Asp Gly Val Gly Ile Phe Ser Phe Ala Arg Tyr Gly Ser Asp		
195	200	205
Phe Tyr Ser Met His Tyr Lys Gly Lys Val Lys Lys Leu Lys Lys Thr		
210	215	220
Ser Ser Ser Asp Tyr Ser Ile Phe Asp Asn Tyr Tyr Ile Pro Glu Ile		
225	230	235
Thr Ser Val Leu Leu Leu Arg Ser Cys Lys Thr Leu Thr His Glu Ile		
245	250	255
Gly His Ile Phe Gly Leu Arg His Cys Gln Trp Leu Ala Cys Leu Met		
260	265	270
Gln Gly Ser Asn His Leu Glu Glu Ala Asp Arg Arg Pro Leu Asn Leu		
275	280	285
Cys Pro Ile Cys Leu His Lys Leu Gln Cys Ala Val Gly Phe Ser Ile		
290	295	300
Val Glu Arg Tyr Lys Ala Leu Val Arg Trp Ile Asp Asp Glu Ser Ser		
305	310	315
Asp Thr Pro Gly Ala Thr Pro Glu His Ser His Glu Asp Asn Gly Asn		
325	330	335
Leu Pro Lys Pro Val Glu Ala Phe Lys Glu Trp Lys Glu Trp Ile Ile		
340	345	350
Lys Cys Leu Ala Val Leu Gln Lys		
355	360	

<210> 4030

<211> 209

<212> PRT

<213> Homo sapiens

<400> 4030

Met Leu Gly Thr Asp Arg Cys Val Val Glu Glu Trp Leu Ser Glu Phe
 1 5 10 15
 Lys Ala Leu Pro Asp Thr Gln Ile Thr Ser Tyr Ala Ala Thr Leu His
 20 25 30
 Arg Lys Lys Thr Leu Val Pro Ala Leu Tyr Lys Val Ile Gln Asp Ser
 35 40 45
 Asn Asn Glu Leu Leu Glu Pro Val Cys His Gln Leu Phe Glu Leu Tyr
 50 55 60
 Arg Ser Ser Glu Val Arg Leu Lys Arg Phe Thr Leu Gln Phe Leu Pro
 65 70 75 80
 Glu Leu Met Trp Val Tyr Leu Arg Leu Thr Val Ser Arg Asp Arg Gln
 85 90 95
 Ser Asn Gly Cys Ile Glu Ala Leu Leu Leu Gly Ile Tyr Asn Leu Glu
 100 105 110
 Ile Ala Asp Lys Asp Gly Asn Asn Lys Val Leu Ser Phe Thr Ile Pro
 115 120 125
 Ser Leu Ser Lys Pro Ser Ile Tyr His Glu Pro Ser Thr Ile Gly Ser
 130 135 140
 Met Ala Leu Thr Glu Gly Ala Leu Cys Gln His Asp Leu Ile Arg Val
 145 150 155 160
 Val Tyr Ser Asp Leu His Pro Gln Arg Glu Thr Phe Thr Ala Gln Asn
 165 170 175
 Arg Phe Glu Val Leu Ser Phe Leu Met Leu Cys Tyr Asn Ser Ala Ile
 180 185 190
 Val Tyr Met Pro Ala Ser Ser Tyr Gln Ser Leu Cys Arg Met Gly Ser
 195 200 205
 Arg

<210> 4031

<211> 139

<212> PRT

<213> Homo sapiens

<400> 4031

```

Met Leu Glu Pro Ser Ala Lys Cys Pro Arg Gln Glu Gly Lys Tyr Pro
 1              5              10              15
His Arg Gly Arg Pro Gly Asp Pro Asp Phe Arg Ala Ala Gly Glu Glu
      20              25              30
Gly Arg Gly Arg Trp Gly Ala Leu Gln Phe Arg Ser Thr Gly Asn Pro
      35              40              45
Glu Lys Ser Ser Pro Leu Arg Gly Leu Pro Ser Pro Ala Pro Ser Leu
      50              55              60
Pro His Arg Ala Leu Gly Ala Ala Ala Gly Arg Gly Asp Arg Arg Gly
65              70              75              80
Arg Glu Asp Arg Glu Ala Lys Glu Leu Gly Trp Gly Val Arg Val Trp
      85              90              95
Trp Arg Gly Trp Asp Asp Thr Gly Val Leu Arg Gly Gly Ala Gly Arg
      100             105             110
Lys Ala Arg Arg Pro Gly Gln Val Gly Val Arg Arg Ser Gly Arg Gln
      115             120             125
Glu Arg Gly Cys Gly Arg Gly Arg Leu Gly Phe
      130             135

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<210> 4032

<211> 105

<212> PRT

<213> Homo sapiens

<400> 4032

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Met Arg Pro Leu Ala Ser Leu Ser Gly Gly Gln Lys Ser Arg Val Ala
 1              5              10              15
Phe Ala Gln Met Thr Met Pro Cys Pro Asn Phe Tyr Ile Leu Asp Glu
      20              25              30
Pro Thr Asn His Leu Asp Met Glu Thr Ile Glu Ala Leu Gly Arg Ala
      35              40              45
Leu Asn Asn Phe Arg Gly Gly Val Ile Leu Val Ser His Asp Glu Arg

```

50	55	60
Phe Ile Arg Leu Val Cys Arg Glu Leu Trp Val Cys Glu Gly Gly Gly		
65	70	75
Val Thr Arg Val Glu Gly Gly Phe Asp Gln Tyr Arg Ala Leu Leu Gln		
85	90	95
Glu Gln Phe Arg Arg Glu Gly Phe Leu		
100	105	

<210> 4033

<211> 111

<212> PRT

<213> Homo sapiens

<400> 4033

Met Ala Tyr Gly Phe Arg Asn Ile Gln Asn Leu Val Gln Arg Leu Lys		
1	5	10
Arg Gly Arg Cys Pro Tyr His Tyr Val Glu Val Met Ala Cys Pro Ser		
20	25	30
Gly Cys Leu Asn Gly Gly Gly Gln Leu Gln Ala Pro Asp Arg Pro Ser		
35	40	45
Arg Glu Leu Leu Gln His Val Glu Arg Leu Tyr Gly Met Val Arg Ala		
50	55	60
Glu Ala Pro Glu Asp Ala Pro Gly Val Gln Glu Leu Tyr Thr His Trp		
65	70	75
Leu Gln Gly Thr Asp Ser Glu Cys Ala Gly Arg Leu Leu His Thr Gln		
85	90	95
Tyr His Ala Val Glu Lys Ala Ser Thr Gly Leu Gly Ile Arg Trp		
100	105	110

<210> 4034

<211> 100

<212> PRT

<213> Homo sapiens

<400> 4034

Met Pro Leu Gly Ser Gly His Arg Trp Leu His Ser Pro Leu Ala Pro
 1 5 10 15
 Cys Arg Cys Pro Cys Thr Leu Pro Pro Ser Arg Pro Thr Arg Asp Ala
 20 25 30
 Ala Leu Pro Trp Pro Ala Ala Val Leu Cys Cys Gly Phe Leu Ala Val
 35 40 45
 Ala Gly Thr Gly Pro Pro Pro Pro Val Pro Ser Gly His Arg Leu Gln
 50 55 60
 Gln Arg Leu Gly Cys Arg Glu Gly Tyr Gln Ser Trp Glu Asn Trp Pro
 65 70 75 80
 Pro Cys Arg Phe Thr Glu Gln Gly Gly Ser His Arg Glu Val Ser Gly
 85 90 95
 Phe Phe Leu Arg
 100

<210> 4035

<211> 282

<212> PRT

<213> Homo sapiens

<400> 4035

Met Ala Leu Ser Cys Ser Ser Trp Cys Arg Ser Pro Gln Trp Lys Phe
 1 5 10 15
 Glu Ala Ser Lys Ser His Ala Asn His Arg Pro Ile Cys Leu Ser Pro
 20 25 30
 Arg Ile Trp Pro Gly Ser Ala Ser Ala Thr Ser Thr Val Cys Ser Ser
 35 40 45
 Ser Glu Ser Phe Leu Pro Arg Gly Pro Pro Ala Val Ser Leu Leu Leu
 50 55 60
 His Gly Pro Pro Thr Val Ser Phe Pro Pro Pro Trp Pro Thr His His
 65 70 75 80
 Val Leu Pro Ser Pro Val Ala His Pro Pro Cys Pro Cys Leu Pro Pro
 85 90 95

Asp Met Pro Leu Glu Leu Pro Gly Pro Cys Cys Cys Pro His Cys Leu
 100 105 110
 Cys Asp Ser Ala Pro Pro Ser Leu Pro Cys Pro Thr Leu Val Gln Gly
 115 120 125
 Ala Ser Arg Pro Ile Leu Ile Leu Arg Ala Phe Pro Gly Pro Cys His
 130 135 140
 Ser Val Pro Cys His Asp Leu Lys Leu Gln Val Gly Ala Ser Pro Phe
 145 150 155 160
 Arg His Gly Cys Pro Pro Ser Val Arg Cys Pro Ser Arg Leu Ile Ala
 165 170 175
 Gly Val Pro Gly Cys Ser Val Leu Ser Trp Ser Leu Gly His Ser Leu
 180 185 190
 Ser Gly Ile Asp Ser Arg Val Gly Ala Thr Pro Gly Leu Gly His Ser
 195 200 205
 Leu Ser Trp Val Arg Ala Pro Pro Gly Leu Gly His Ser Leu Ser Gly
 210 215 220
 Val Gly Ala Thr Pro Gly Leu Gly His Leu Leu Ser Gly Val Gly Ala
 225 230 235 240
 Ser Pro Gly Glu Asp Thr Glu His Ala Ala Ala Leu Thr Pro Cys Gly
 245 250 255
 Val Pro Pro Val Pro Gly Cys Arg Ser His Ser Gln Pro Leu Ser His
 260 265 270
 Leu Val Ser Ser Ser Arg Cys Cys Gly Pro
 275 280

<210> 4036

<211> 129

<212> PRT

<213> Homo sapiens

<400> 4036

Met Asn Lys Val Asn Leu Leu Val Ile Phe Lys Leu Leu Val Leu Gly
 1 5 10 15
 Val Cys Asn Lys Val Lys Val Tyr Ile Leu Val Leu Pro Lys Ser His

```

                20                25                30
Leu Lys Tyr Leu Gln Ile Phe Asn Leu Cys Val Val Tyr Pro Ile Ile
      35                40                45
Ala Pro Ile Ser Gly Lys Ser Val Phe Leu Lys Phe Lys Lys Glu Glu
      50                55                60
Lys Gln Gln Ser Asp Tyr Phe Ala Val Glu Lys Lys Ser Val Ser Phe
      65                70                75                80
Met Gly Tyr Thr Phe Ile Phe Leu Cys Ser Val Lys Leu Ala Thr Leu
      85                90                95
Trp Gly Thr Trp Val Leu Phe Leu Leu Val His Asp Val Cys Phe Arg
      100                105                110
Thr Tyr Leu Leu Thr Phe Gln Arg Thr Ser Tyr Ile Thr Cys Leu Thr
      115                120                125
Tyr

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<210> 4037

<211> 117

<212> PRT

<213> Homo sapiens

<400> 4037

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Met Gly Asn Leu Cys Ser Trp Thr Leu Lys Ile Leu Glu Ser Leu His
  1                5                10                15
Ile Arg Asn Val Lys Met Ala Trp Pro Ser Lys Gly Phe Ser Asn Ser
      20                25                30
Ser Cys Leu Gln Ala Val Pro Gln Thr Glu His Tyr Asn Leu Arg Ser
      35                40                45
Phe Leu Leu Ala Tyr Asn Ser Asp Ser Gly Ser Pro Lys Gln Ser Ile
      50                55                60
Trp Leu Ala Ile Ala Arg Leu Val Asn Gly Ile Phe Tyr Leu Leu Lys
      65                70                75                80
Thr Ala Lys Tyr Cys Thr Arg Gly Arg Ser Trp Ala Ala Gly Arg Glu
      85                90                95

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Gln Gln Met Glu Arg Ser Leu Leu Ile Val Leu Ile Ser Trp Lys Thr
 100 105 110
 Thr Val Arg Arg Cys
 115

<210> 4038

<211> 172

<212> PRT

<213> Homo sapiens

<400> 4038

Met Pro Gln Ile Pro Arg Asp Asn Lys Ala Ala Ala Leu Leu Met Leu
 1 5 10 15
 Thr Lys Asn Val Asp Phe Val Lys Asp Ala His Glu Glu Met Glu Gln
 20 25 30
 Ala Val Glu Glu Cys Asp Pro Tyr Ser Gly Leu Leu Asn Asp Thr Glu
 35 40 45
 Glu Asn Asn Ser Asp Asn His Asn His Glu Asp Asp Val Leu Gly Phe
 50 55 60
 Pro Ser Asn Gln Asp Leu Tyr Trp Ser Glu Asp Asp Gln Glu Leu Ile
 65 70 75 80
 Ile Pro Cys Leu Ala Leu Val Arg Ala Ser Lys Ala Cys Leu Lys Lys
 85 90 95
 Ile Arg Met Leu Val Ala Glu Asn Gly Lys Lys Asp Gln Val Ala Gln
 100 105 110
 Leu Asp Asp Ile Val Asp Ile Ser Asp Glu Ile Ser Pro Ser Val Asp
 115 120 125
 Asp Leu Ala Leu Ser Ile Tyr Pro Pro Met Cys His Leu Thr Val Arg
 130 135 140
 Ile Asn Val Ser Thr Gly Phe Glu Gly Ile Ala Thr Glu Gln Met Gly
 145 150 155 160
 Arg Ile Ser Leu Ile Thr Ser Ile Ser Cys Lys Leu
 165 170

<210> 4039

<211> 164

<212> PRT

<213> Homo sapiens

<400> 4039

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Met Met Lys Ile Pro Lys Gly Met Ala Thr Lys Ala Lys Ile Asp Lys
  1             5             10             15
Trp Asp Leu Ile Lys Leu Lys Ser Phe Cys Thr Ala Lys Glu Thr Thr
      20             25             30
Ile Arg Val Asn Arg Gln Pro Thr Lys Trp Glu Lys Asn Phe Glu Ile
      35             40             45
Tyr Leu Ser Asp Lys Gly Leu Ile Ser Arg Ile Tyr Lys Glu Leu Lys
      50             55             60
Gln Ile Tyr Lys Lys Lys Thr Asn Asn Ser Ile Arg Asn Trp Ala Lys
      65             70             75             80
Asp Met Asn Arg His Ile Ser Lys Glu Asp Ile Tyr Ala Ala Thr Lys
              85             90             95
His Met Arg Lys Ser Ser Thr Ser Leu Val Ile Arg Glu Met Gln Ile
              100            105            110
Lys Thr Thr Met Arg His His Leu Thr Ser Val Lys Met Ala Ile Ile
              115            120            125
Lys Lys Ser Gly Asn Asn Arg Phe Trp Arg Glu Cys Gly Glu Ile Glu
              130            135            140
Met Val Leu His Cys Trp Trp Glu Cys Lys Leu Val Gln Pro Leu Trp
      145            150            155            160
Lys Thr Val Trp

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<210> 4040

<211> 134

<212> PRT

<213> Homo sapiens

<400> 4040

Met Pro Gln Pro Pro Ser Trp Asp Tyr Arg Tyr Ala Pro Pro Arg Leu
 1 5 10 15
 Thr Asn Ser Asn Phe Cys Ile Phe Ser Arg Asp Arg Phe His His Val
 20 25 30
 Gly Gln Ala Gly Leu Glu Leu Pro Thr Ser Gly Asp Pro Pro Thr Leu
 35 40 45
 Ala Ser Gln Ser Ala Gly Ile Thr Ser Val Ser His Cys Thr Pro Pro
 50 55 60
 Thr Ile Ile Phe Ser Leu Ile Ser Phe Asn Ser Phe Cys Leu Tyr Asp
 65 70 75 80
 Leu Leu Phe Ser Phe Leu Ser Ser Ile Leu Val Asn Ile Phe Phe Ile
 85 90 95
 Val Ser Thr Phe Ile Cys Pro Leu Phe Ser Phe Ile Phe Thr Ser Val
 100 105 110
 Met Val Ile Leu Pro Val Phe Trp Arg Trp Cys Leu Asn Met Phe Pro
 115 120 125
 Arg Leu Asp Leu Asn Ala
 130

<210> 4041

<211> 105

<212> PRT

<213> Homo sapiens

<400> 4041

Met Asp Leu Asn Tyr Thr Leu Lys Gln Met Asp Leu Thr Asp Ile Tyr
 1 5 10 15
 Arg Thr Phe His Pro Thr Thr Ala Glu Tyr Thr Leu Tyr Ser Thr Val
 20 25 30
 His Gly Thr Phe Ser Lys Ile Asp His Met Ile Gly His Lys Met Ser
 35 40 45
 Phe Asn Lys Phe Lys Lys Thr Glu Ile Ile Ser Ser Thr Leu Ser Asp
 50 55 60
 His Ser Glu Ile Lys Leu Glu Ile Asn Ser Arg Arg Asn Leu Gln Asn
 65 70 75 80

His Ala Asn Thr Arg Lys Leu Asn Asn Leu Leu Leu Asn Glu His Trp
85 90 95
Val Lys Asn Glu Ile Lys Met Glu Ile
100 105

<210> 4042
<211> 506
<212> PRT
<213> Homo sapiens

<400> 4042

Met	Ile	Met	Ala	Ser	Phe	Phe	Leu	Leu	Arg	Arg	Lys	Lys	Ser	Lys	Ser
1				5					10					15	
Arg	Ser	Arg	Ser	His	Glu	Arg	Lys	Arg	Ser	Lys	Ser	Lys	Glu	Arg	Lys
			20					25					30		
Arg	Ser	Arg	Asp	Arg	Glu	Arg	Lys	Lys	Ser	Lys	Ser	Arg	Glu	Arg	Lys
		35					40				45				
Arg	Ser	Arg	Ser	Lys	Glu	Arg	Arg	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Asp
50						55				60					
Arg	Arg	Phe	Arg	Gly	Arg	Tyr	Arg	Ser	Pro	Tyr	Ser	Gly	Pro	Lys	Phe
65				70					75					80	
Asn	Ser	Ala	Ile	Arg	Gly	Lys	Ile	Gly	Leu	Pro	His	Ser	Ile	Lys	Leu
			85						90					95	
Ser	Arg	Arg	Arg	Ser	Arg	Ser	Lys	Ser	Pro	Phe	Arg	Lys	Asp	Lys	Ser
		100						105				110			
Pro	Val	Arg	Glu	Pro	Ile	Asp	Asn	Leu	Thr	Pro	Glu	Glu	Arg	Asp	Ala
	115						120				125				
Arg	Thr	Val	Phe	Cys	Met	Gln	Leu	Ala	Ala	Arg	Ile	Arg	Pro	Arg	Asp
130						135				140					
Leu	Glu	Glu	Phe	Phe	Ser	Thr	Val	Gly	Lys	Val	Arg	Asp	Val	Arg	Met
145				150					155					160	
Ile	Ser	Asp	Arg	Asn	Ser	Arg	Arg	Ser	Lys	Gly	Ile	Ala	Tyr	Val	Glu
			165						170				175		
Phe	Val	Asp	Val	Ser	Ser	Val	Pro	Leu	Ala	Ile	Gly	Leu	Thr	Gly	Gln
	180							185					190		

Arg Val Leu Gly Val Pro Ile Ile Val Gln Ala Ser Gln Ala Glu Lys
 195 200 205
 Asn Arg Ala Ala Ala Met Ala Asn Asn Leu Gln Lys Gly Ser Ala Gly
 210 215 220
 Pro Met Arg Leu Tyr Val Gly Ser Leu His Phe Asn Ile Thr Glu Asp
 225 230 235 240
 Met Leu Arg Gly Ile Phe Glu Pro Phe Gly Arg Ile Glu Ser Ile Gln
 245 250 255
 Leu Met Met Asp Ser Glu Thr Gly Arg Ser Lys Gly Tyr Gly Phe Ile
 260 265 270
 Thr Phe Ser Asp Ser Glu Cys Ala Lys Lys Ala Leu Glu Gln Leu Asn
 275 280 285
 Gly Phe Glu Leu Ala Gly Arg Pro Met Lys Val Gly His Val Thr Glu
 290 295 300
 Arg Thr Asp Ala Ser Ser Ala Ser Ser Phe Leu Asp Ser Asp Glu Leu
 305 310 315 320
 Glu Arg Thr Gly Ile Asp Leu Gly Thr Thr Gly Arg Leu Gln Leu Met
 325 330 335
 Ala Arg Leu Ala Glu Gly Thr Gly Leu Gln Ile Pro Pro Ala Ala Gln
 340 345 350
 Gln Ala Leu Gln Met Ser Gly Ser Leu Ala Phe Gly Ala Val Ala Glu
 355 360 365
 Phe Ser Phe Val Ile Asp Leu Gln Thr Arg Leu Ser Gln Gln Thr Glu
 370 375 380
 Ala Ser Ala Leu Ala Ala Ala Ala Ser Val Gln Pro Leu Ala Thr Gln
 385 390 395 400
 Cys Phe Gln Leu Ser Asn Met Phe Asn Pro Gln Thr Glu Glu Glu Val
 405 410 415
 Gly Trp Asp Thr Glu Ile Lys Asp Asp Val Ile Glu Glu Cys Asn Lys
 420 425 430
 His Gly Gly Val Ile His Ile Tyr Val Asp Lys Asn Ser Ala Gln Gly
 435 440 445
 Asn Val Tyr Val Lys Cys Pro Ser Ile Ala Ala Ala Ile Ala Ala Val
 450 455 460
 Asn Ala Leu His Gly Arg Trp Phe Ala Gly Lys Met Ile Thr Ala Ala
 465 470 475 480

Tyr Val Pro Leu Pro Thr Tyr His Asn Leu Phe Pro Asp Ser Met Thr
 485 490 495
 Ala Thr Gln Leu Leu Val Pro Ser Arg Arg
 500 505

<210> 4043

<211> 123

<212> PRT

<213> Homo sapiens

<400> 4043

Met Trp Phe Leu Arg Arg Lys His Ala Gly Thr Ala Ile Pro Ser Arg
 1 5 10 15
 Leu Glu Glu His Thr Asp Ala Gly Val Ser Glu Pro Asp Leu Gly Ser
 20 25 30
 Ser Leu Thr Ser Ala Ala His His Arg Gln Ala Cys Lys Ser Tyr Phe
 35 40 45
 Ser Ser Leu Ser Leu His Phe Phe His Ile Glu Trp Gly Ser Val Leu
 50 55 60
 Pro Ala Met Arg Val Val Val Asn Ile Gln Arg Lys Leu Ser Arg Ser
 65 70 75 80
 Thr Ile Thr Leu Glu Asn Cys Leu Ala Val Leu Thr Asp Ala Glu His
 85 90 95
 Val Gly Thr Ser Gly Pro Ser Ser Pro Thr Ala Gly Asp Thr Leu Ser
 100 105 110
 Arg Tyr Val Pro Thr Cys Thr Arg Lys Tyr Leu
 115 120

<210> 4044

<211> 132

<212> PRT

<213> Homo sapiens

<400> 4044

Met Asp Ser Ser Ser Ser Gly Val Ser Asp Trp Arg Asp Ala Ser Gly
 1 5 10 15
 Arg Gly Ser Phe Pro Gly Ala Pro Ala Phe Val Met Val Asp Ala Pro
 20 25 30
 Leu Arg Cys His Leu Leu Arg Arg Thr Ser Cys Ser Val Leu Asp Arg
 35 40 45
 Trp Ala Pro Val Gly Pro Pro Arg Leu Glu Met Asn Leu Lys Gly Thr
 50 55 60
 Pro Cys Leu Gly Asp Leu Ser Gln Ala Gly Gln Arg Asn Asn Gln Thr
 65 70 75 80
 Thr Val Ser Ala Trp Arg Leu Gln Ser Phe Ala Gln Gly Pro Ser Glu
 85 90 95
 Gly Gly Leu Gly Lys Thr Ser Trp Gly Leu Gly Gln Leu Ser Lys Met
 100 105 110
 Asp Lys Glu Ser Asn His Leu Cys Leu His Ile Phe Phe Ile Ser Ser
 115 120 125
 Ser Gln Gln Pro
 130

<210> 4045

<211> 506

<212> PRT

<213> Homo sapiens

<400> 4045

Met Pro Ser Ala Leu Ala Ile Phe Thr Cys Arg Pro Asn Ser His Pro
 1 5 10 15
 Phe Gln Glu Arg His Val Tyr Leu Asp Glu Pro Ile Lys Ile Gly Arg
 20 25 30
 Ser Val Ala Arg Cys Arg Pro Ala Gln Asn Asn Ala Thr Phe Asp Cys
 35 40 45
 Lys Val Leu Ser Arg Asn His Ala Leu Val Trp Phe Asp His Lys Thr
 50 55 60
 Gly Lys Phe Tyr Leu Gln Asp Thr Lys Ser Ser Asn Gly Thr Phe Ile

65	70	75	80
Asn Ser Gln Arg Leu Ser Arg Gly Ser Glu Glu Ser Pro Pro Cys Glu			
	85	90	95
Ile Leu Ser Gly Asp Ile Ile Gln Phe Gly Val Asp Val Thr Glu Asn			
	100	105	110
Thr Arg Lys Val Thr His Gly Cys Ile Val Ser Thr Ile Lys Leu Phe			
	115	120	125
Leu Pro Asp Gly Met Glu Ala Arg Leu Arg Ser Asp Val Ile His Ala			
	130	135	140
Pro Leu Pro Ser Pro Val Asp Lys Val Ala Ala Asn Thr Pro Ser Met			
145	150	155	160
Tyr Ser Gln Glu Leu Phe Gln Leu Ser Gln Tyr Leu Gln Glu Ala Leu			
	165	170	175
His Arg Glu Gln Met Leu Glu Gln Lys Leu Ala Thr Leu Gln Arg Leu			
	180	185	190
Leu Ala Ile Thr Gln Glu Ala Ser Asp Thr Ser Trp Gln Ala Leu Ile			
	195	200	205
Asp Glu Asp Arg Leu Leu Ser Arg Leu Glu Val Met Gly Asn Gln Leu			
	210	215	220
Gln Ala Cys Ser Lys Asn Gln Thr Glu Asp Ser Leu Arg Lys Glu Leu			
225	230	235	240
Ile Ala Leu Gln Glu Asp Lys His Asn Tyr Glu Thr Thr Ala Lys Glu			
	245	250	255
Ser Leu Arg Arg Val Leu Gln Glu Lys Ile Glu Val Val Arg Lys Leu			
	260	265	270
Ser Glu Val Glu Arg Ser Leu Ser Asn Thr Glu Asp Glu Cys Thr His			
	275	280	285
Leu Lys Glu Met Asn Glu Arg Thr Gln Glu Glu Leu Arg Glu Leu Ala			
	290	295	300
Asn Lys Tyr Asn Gly Ala Val Asn Glu Ile Lys Asp Leu Ser Asp Lys			
305	310	315	320
Leu Lys Val Ala Glu Gly Lys Gln Glu Glu Ile Gln Gln Lys Gly Gln			
	325	330	335
Ala Glu Lys Lys Glu Leu Gln His Lys Ile Asp Glu Met Glu Glu Lys			
	340	345	350

Glu Gln Glu Leu Gln Ala Lys Ile Glu Ala Leu Gln Ala Asp Asn Asp
 355 360 365
 Phe Thr Asn Glu Arg Leu Thr Ala Leu Gln Val Arg Leu Glu His Leu
 370 375 380
 Gln Glu Lys Thr Leu Lys Glu Cys Ser Ser Leu Gly Ile Gln Val Asp
 385 390 395 400
 Asp Phe Leu Pro Lys Ile Asn Gly Ser Thr Glu Lys Glu Lys Leu Ile
 405 410 415
 Val Glu Gly His Leu Thr Lys Ala Val Glu Glu Thr Lys Leu Ser Lys
 420 425 430
 Glu Asn Gln Thr Arg Ala Lys Glu Ser Asp Phe Ser Asp Thr Leu Ser
 435 440 445
 Pro Ser Lys Glu Lys Ser Ser Asp Asp Thr Thr Asp Ala Gln Met Asp
 450 455 460
 Glu Gln Asp Leu Asn Glu Pro Leu Ala Lys Val Ser Leu Leu Lys Gly
 465 470 475 480
 Thr Leu Thr Cys Phe Tyr Asp Ile Val Asn Gln Gly Ile Lys Ser Pro
 485 490 495
 Phe Ala Ile Lys Ser Val Leu Asp Ile Met
 500 505

<210> 4046

<211> 134

<212> PRT

<213> Homo sapiens

<400> 4046

Met Pro Pro Thr Ser Gln Leu Pro Thr Leu Asp Thr Ala Leu Gln Thr
 1 5 10 15
 Arg His Pro Trp Ala Leu Ser Ile Thr Arg Gly Ala Thr Val Ser Arg
 20 25 30
 Ala Pro Leu Gln Gly Arg Val Thr Ala Ile Val Pro Lys Ala Ser Cys
 35 40 45
 Leu His Gly Thr Pro Arg Cys Phe Leu Gln Arg Gly Val Pro Ser Trp
 50 55 60

Ser Ser Pro Gln Thr Trp Ser Trp Pro Ala Pro Ser Gln Pro Phe Gln
 65 70 75 80
 Gln Gly Pro Arg Leu Met Thr Ala Pro Ala Pro His Pro Gly Ser Gly
 85 90 95
 Thr Arg Thr Ser Ser His His Pro Ser Pro Leu Arg Arg Ser Ser Leu
 100 105 110
 Ala Val Gln Val Pro Ile Ser Gly Glu Gly Met Trp Glu Gly Asp Arg
 115 120 125
 Glu Gly Leu Gly Ser Lys
 130

<210> 4047

<211> 203

<212> PRT

<213> Homo sapiens

<400> 4047

Met Ile Ile Leu Ile Val Asn Ile Gly Ile Leu Asn Val Lys Cys Gln
 1 5 10 15
 Thr Asn Val Thr Tyr Ala Gly Ala Leu Ala Leu Leu Ile Arg Phe Trp
 20 25 30
 Phe Lys Phe Cys His Ser Ser Ser Trp Val Arg Gly Phe Ala Val Ser
 35 40 45
 Phe Phe Phe Trp Thr Leu Asp Pro Glu Pro Val Leu Ala Ser Gln Phe
 50 55 60
 Leu Ser Leu Tyr Pro Phe Pro Ser Val Ser Ser Ser Leu Phe Pro Leu
 65 70 75 80
 Ser Leu Phe Val Phe Leu Ile Ser Phe Cys Phe Ser Glu Tyr Leu His
 85 90 95
 Phe Tyr Leu Cys Val Ser Val Tyr Phe Ser Val Tyr Leu Ser Val Leu
 100 105 110
 Gln Ser Val Phe Leu Phe Leu Ala Leu Arg Gln Cys Leu Phe Leu Ser
 115 120 125
 Ser Leu Ser Cys Ser Ala Met Ala Ile Ser Thr Ala Leu Phe Leu Thr
 130 135 140

Leu Ile Phe Gly Leu Cys Val Ser Pro Ser His Phe Leu Ser His Ser
 145 150 155 160
 Val Ser Val Ser Ile Ser Val Ser Pro Leu Leu Cys Pro Gln Ser Leu
 165 170 175
 Cys Leu Pro Glu Ala Leu Phe Leu Ser Leu Leu Cys Cys Val Leu Asn
 180 185 190
 Leu Ser Val Ser Leu Arg Leu Tyr Phe Cys Leu
 195 200

<210> 4048

<211> 145

<212> PRT

<213> Homo sapiens

<400> 4048

Met Leu Cys Cys Leu Asp Ile Ser Ser Thr Arg Tyr Pro Lys Ser Ser
 1 5 10 15
 Leu Ser Ser Ser Lys Phe His Arg Ser Leu Gly Gln Gly Gln Met Leu
 20 25 30
 Pro Val Cys Leu His Ser Lys Ser Asp Leu Tyr Ser Ser Ser Gln Lys
 35 40 45
 Val Pro His Leu His Leu Arg Leu His Gln Pro Arg Leu His Cys Thr
 50 55 60
 Tyr Tyr Tyr Gln Tyr Phe Gly Gln Gly His Ser Thr Ser Leu Tyr Glu
 65 70 75 80
 Val Pro Asn Phe Pro Thr Ser Pro Cys Leu Leu Leu Ser Pro Pro Asn
 85 90 95
 Cys Ser Asn Leu Cys Leu Leu Pro Ser Ser Lys Val Ala Ser Thr Tyr
 100 105 110
 Leu Gly Ile Phe Thr Ala Ala Pro His Ser Trp Tyr Gln Phe Thr Val
 115 120 125
 Leu Ile Cys Ser Arg Ala Ala Ile Arg Thr Asp Ser Gly Leu Gly Asn
 130 135 140
 Leu
 145

<210> 4049

<211> 102

<212> PRT

<213> Homo sapiens

<400> 4049

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Met Ala Thr Gly Val Cys Ser Asp Phe Ser Cys Val Glu Pro Ser Gly
 1             5             10             15
Cys Ala Ala Trp Ala Gly Gly Met Leu Leu Ala Gly Gln Asp Val His
             20             25             30
Gln Ala Gly Cys Gly Cys Thr Gly Leu Lys Gly Cys Phe Gly Arg Pro
             35             40             45
Trp Cys Cys Arg Ala Ala Gly Arg Arg Val Leu Ala Arg Ser Gln Leu
             50             55             60
Ser Leu Arg Phe Leu Leu Pro Leu Gly Val Cys Gly Cys Gly Gln Ile
             65             70             75             80
Leu Arg Gly Ser Arg Pro Trp Glu Pro Thr Val Ser Gly Gly Trp Glu
             85             90             95
Phe Leu Val Arg Gln Thr
             100

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<210> 4050

<211> 924

<212> PRT

<213> Homo sapiens

<400> 4050

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Met Arg Ser Lys Asp Ile Glu Ala Ser Gly Phe Asn Gly Thr Ala Ala
 1             5             10             15
Phe Met Glu Val Arg Val Gln Ser Ile Val Val Glu Phe Ile Leu Thr
             20             25             30
His Val Asp Gln Leu Phe Gly Gly Ala Ala Leu Ser Gly Gly Glu Val
             35             40             45

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Glu Ser Gly Trp Arg Ser Leu Pro Gly Thr Arg Ala Ser Gly Ser Pro
 50 55 60
 Glu Asp Leu Met Pro Arg Pro Leu Pro Tyr His Leu Pro Ser Ile Leu
 65 70 75 80
 Gln Ala Gly Asp Gly Pro Pro Gln Met Arg Pro Tyr His Thr Ile Ile
 85 90 95
 Glu Ile Ala Glu His Lys Arg Lys Gly Ser Leu Lys Val Arg Lys Trp
 100 105 110
 Arg Ser Ile Phe Asn Leu Gly Arg Ser Gly His Glu Thr Lys Arg Lys
 115 120 125
 Leu Pro Arg Gly Ala Glu Asp Arg Glu Asp Lys Ser Asn Lys Gly Thr
 130 135 140
 Leu Arg Pro Ala Lys Ser Met Asp Ser Leu Ser Ala Ala Ala Gly Ala
 145 150 155 160
 Ser Asp Glu Pro Glu Gly Leu Val Gly Pro Ser Ser Pro Arg Pro Ser
 165 170 175
 Pro Leu Leu Pro Glu Ser Leu Glu Asn Asp Ser Ile Glu Ala Ala Glu
 180 185 190
 Gly Glu Gln Glu Pro Glu Ala Glu Ala Leu Gly Gly Thr Asn Ser Glu
 195 200 205
 Pro Gly Thr Pro Arg Ala Gly Arg Ser Ala Ile Arg Ala Gly Gly Ser
 210 215 220
 Ser Arg Ala Glu Arg Cys Ala Gly Val His Ile Ser Asp Pro Tyr Asn
 225 230 235 240
 Val Asn Leu Pro Leu His Ile Thr Ser Ile Leu Ser Val Pro Pro Asn
 245 250 255
 Ile Ile Ser Asn Val Ser Leu Ala Arg Leu Thr Arg Gly Leu Glu Cys
 260 265 270
 Pro Ala Leu Gln His Arg Pro Ser Pro Ala Ser Ser Pro Gly Pro Gly
 275 280 285
 Pro Gly Leu Gly Pro Gly Pro Pro Asp Glu Lys Leu Glu Ala Ser Pro
 290 295 300
 Ala Ser Ser Pro Leu Ala Asp Ser Gly Pro Asp Asp Leu Ala Pro Ala
 305 310 315 320
 Leu Glu Asp Ser Leu Ser Gln Glu Val Gln Asp Ser Phe Ser Phe Leu
 325 330 335

Glu Asp Ser Ser Ser Ser Glu Pro Glu Trp Val Gly Ala Glu Asp Gly
 340 345 350
 Glu Val Ala Gln Ala Glu Ala Ala Gly Ala Ala Phe Ser Pro Gly Glu
 355 360 365
 Asp Asp Pro Gly Met Gly Tyr Leu Glu Glu Leu Leu Gly Val Gly Pro
 370 375 380
 Gln Val Glu Glu Phe Ser Val Glu Pro Pro Leu Asp Asp Leu Ser Leu
 385 390 395 400
 Asp Glu Ala Gln Phe Val Leu Ala Pro Ser Cys Cys Ser Leu Asp Ser
 405 410 415
 Ala Gly Pro Arg Pro Glu Val Glu Glu Glu Asn Gly Glu Glu Val Phe
 420 425 430
 Leu Ser Ala Tyr Asp Asp Leu Ser Pro Leu Leu Gly Pro Lys Pro Pro
 435 440 445
 Ile Trp Lys Gly Ser Gly Ser Leu Glu Gly Glu Ala Ala Gly Cys Gly
 450 455 460
 Arg Gln Ala Leu Gly Gln Gly Gly Glu Glu Gln Ala Cys Trp Glu Val
 465 470 475 480
 Gly Glu Asp Lys Gln Ala Glu Pro Gly Gly Arg Leu Asp Ile Arg Glu
 485 490 495
 Glu Ala Glu Gly Ser Pro Glu Thr Lys Val Glu Ala Gly Lys Ala Ser
 500 505 510
 Glu Asp Arg Gly Glu Ala Gly Gly Ser Gln Glu Thr Lys Val Arg Leu
 515 520 525
 Arg Glu Gly Ser Arg Glu Glu Thr Glu Ala Lys Glu Glu Lys Ser Lys
 530 535 540
 Gly Gln Lys Lys Ala Asp Ser Met Glu Ala Lys Gly Val Glu Glu Pro
 545 550 555 560
 Gly Gly Asp Glu Tyr Thr Asp Glu Lys Glu Lys Glu Ile Glu Arg Glu
 565 570 575
 Glu Asp Glu Gln Arg Glu Glu Ala Gln Val Glu Ala Gly Arg Asp Leu
 580 585 590
 Glu Gln Gly Ala Gln Glu Asp Gln Val Ala Glu Glu Lys Trp Glu Val
 595 600 605
 Val Gln Lys Gln Glu Ala Glu Gly Val Arg Glu Asp Glu Asp Lys Gly
 610 615 620

Gln Arg Glu Lys Gly Tyr His Glu Ala Arg Lys Asp Gln Gly Asp Gly
 625 630 635 640
 Glu Asp Ser Arg Ser Pro Glu Ala Ala Thr Glu Gly Gly Ala Gly Glu
 645 650 655
 Val Ser Lys Glu Arg Glu Ser Gly Asp Gly Glu Ala Glu Gly Asp Gln
 660 665 670
 Arg Ala Gly Gly Tyr Tyr Leu Glu Glu Asp Thr Leu Ser Glu Gly Ser
 675 680 685
 Gly Val Ala Ser Leu Glu Val Asp Cys Ala Lys Glu Gly Asn Pro His
 690 695 700
 Ser Ser Glu Met Glu Glu Val Ala Pro Gln Pro Pro Gln Pro Glu Glu
 705 710 715 720
 Met Glu Pro Glu Gly Gln Pro Ser Pro Asp Gly Cys Leu Cys Pro Cys
 725 730 735
 Ser Leu Gly Leu Gly Gly Val Gly Met Arg Leu Ala Ser Thr Leu Val
 740 745 750
 Gln Val Gln Gln Val Arg Ser Val Pro Val Val Pro Pro Lys Pro Gln
 755 760 765
 Phe Ala Lys Met Pro Ser Ala Met Cys Ser Lys Ile His Val Ala Pro
 770 775 780
 Ala Asn Pro Cys Pro Arg Pro Gly Arg Leu Asp Gly Thr Pro Gly Glu
 785 790 795 800
 Arg Ala Trp Glu Ser Arg Ala Ser Arg Ser Ser Trp Arg Asn Gly Gly
 805 810 815
 Ser Leu Ser Phe Asp Ala Ala Val Ala Leu Ala Arg Asp Arg Gln Arg
 820 825 830
 Thr Glu Ala Gln Gly Val Arg Arg Thr Gln Thr Cys Thr Glu Gly Gly
 835 840 845
 Asp Tyr Cys Leu Ile Pro Arg Thr Ser Pro Cys Ser Met Ile Ser Ala
 850 855 860
 His Ser Pro Arg Pro Leu Ser Cys Leu Glu Leu Pro Ser Glu Gly Ala
 865 870 875 880
 Glu Gly Ser Gly Ser Arg Ser Arg Leu Ser Leu Pro Pro Arg Glu Pro
 885 890 895
 Gln Val Pro Asp Pro Leu Leu Ser Ser Gln Arg Arg Ser Tyr Ala Phe
 900 905 910

Glu Thr Gln Ala Asn Pro Gly Lys Gly Glu Gly Leu
 915 920

<210> 4051

<211> 110

<212> PRT

<213> Homo sapiens

<400> 4051

Met Ile Leu Ser Cys Ile Asn Cys Gln Gly Asp Asn Arg Arg Cys Val
 1 5 10 15
 Pro Arg Pro Pro Leu Val Ser Arg Leu Glu Glu Ser Pro Gly Trp Cys
 20 25 30
 Ile Arg Ala Arg Gln Arg Gly Arg Pro Ser Gln Leu His Cys Lys Gln
 35 40 45
 Phe Gln Leu His Ser Gln Gly Gln Ala Pro Trp Lys Arg Leu Leu Phe
 50 55 60
 Asn Cys Trp Pro Phe Gln Pro His Cys Ala Asp Ser Ser Phe Ser Leu
 65 70 75 80
 Gly Tyr Gln Ser Val Pro Leu Gln Phe Thr Ile Val Phe Val Phe Leu
 85 90 95
 Ser Phe Thr Asn Cys Asp Met Ser Lys Leu Asn Tyr Ala Ile
 100 105 110

<210> 4052

<211> 151

<212> PRT

<213> Homo sapiens

<400> 4052

Met His Ala Gly Lys Arg Ser Pro Leu Thr Gln Ser Ile Ser Cys Val
 1 5 10 15
 Cys Leu Pro Glu Leu Gly Ala Leu Trp Glu Ile Glu Ser Ala Arg Val
 20 25 30

Asn Leu Arg Val Ser Gly Arg Glu Ala Ser Arg Glu Met Glu Ser Ser
 35 40 45
 Pro Arg Pro His Arg Ile Ala Gly Val Lys Arg Phe Leu Lys His Ala
 50 55 60
 Gly Lys Trp Ser Leu Arg Trp Phe Leu Ser Pro Arg Trp Ile Leu Gln
 65 70 75 80
 Phe Arg Arg Trp Ala Arg Lys Trp Ser Arg Phe Thr Arg Ser Ser Phe
 85 90 95
 Gln Val Arg Trp Ala Ala Val Pro Ala Gly Lys Cys Ser Gln His Gln
 100 105 110
 Gly Leu Ser Ala Val Ala Thr Ala Ser Pro Gly Val Phe Trp Glu Met
 115 120 125
 Glu Phe Asp Val Ser Ser Pro Leu Thr Glu Gly Ala Gly Ser Pro Met
 130 135 140
 Ser Ser Lys His Ala Gly Glu
 145 150

<210> 4053

<211> 150

<212> PRT

<213> Homo sapiens

<400> 4053

Met Arg Ile Pro Leu Pro His Leu Met Ser Ser Tyr Ile Lys Asp Leu
 1 5 10 15
 Cys Arg Ser Gly Ile Cys Glu Ser Leu Val Ser Asp Ala Val Leu Phe
 20 25 30
 Ser Leu Thr Pro Val Ile Pro Glu Leu Trp Glu Ala Glu Thr Gly Arg
 35 40 45
 Ser Pro Asp Val Gly Ser Ser Arg Pro Ser Trp Pro Thr Trp Arg Ser
 50 55 60
 Leu Ser Leu Leu Lys Ile Gln Lys Leu Ala Ser Arg Gly Ser Ala Cys
 65 70 75 80
 Leu Trp Ser Gln Leu Leu Gly Ser Leu Arg Gln Glu Asn Cys Leu Asn
 85 90 95

Leu Gly Gly Gly Gly Cys Ser Glu Pro Lys Leu Cys Arg Cys Thr Pro
 100 105 110
 Ala Trp Val Thr Val Arg Ile Cys Leu Lys Lys Lys Lys Lys Lys Asn
 115 120 125
 Trp Leu Gly Ala Val Ala Leu Ala Ser Asn Pro Asp Thr Leu Arg Gly
 130 135 140
 Leu Val Trp Arg Ile Ala
 145 150

<210> 4054

<211> 1260

<212> PRT

<213> Homo sapiens

<400> 4054

Met Gly Val Tyr Pro Thr Asp Leu Thr Leu Gln Leu Leu Ala Val Arg
 1 5 10 15
 Arg Lys Ser Arg Leu Arg Asp Pro Gly Leu Gln Gln Thr Leu Arg Gly
 20 25 30
 Gln Leu Arg Leu Leu Glu Asn Asp Ser Arg Glu Met Ala Arg Val Leu
 35 40 45
 Gly Glu Leu Ser Ala Arg Leu Leu Ser Ile His Ser Asp Gln Asp Arg
 50 55 60
 Ile Val Val Thr Phe Lys Thr Phe Glu Glu Ile Trp Lys Phe Ser Thr
 65 70 75 80
 Tyr His Ala Leu Gly Phe Thr His His Cys Leu Ala Asn Leu Leu Met
 85 90 95
 Asp Gln Ala Phe Trp Leu Leu Leu Pro Ser Glu Glu Glu Glu Thr Ala
 100 105 110
 Ile Gln Val His Val Asp Glu Asn Ala Leu Arg Leu Thr His Glu Ser
 115 120 125
 Leu Leu Ile Gln Glu Gly Pro Phe Phe Val Leu Cys Pro Asp His His
 130 135 140
 Val Arg Val Met Thr Gly Pro Arg Asp Ala Gly Asn Gly Pro Gln Ala
 145 150 155 160

Leu Arg Gln Ala Ser Gly Ala Pro Gln Gly Glu Ala Ala Pro Glu Thr
 165 170 175
 Asp Ser Ser Pro Pro Ser Pro Ser Val Ser Ser Glu Glu Val Ala Val
 180 185 190
 Ala Ala Ala Pro Glu Pro Leu Ile Pro Phe His Gln Trp Ala Leu Arg
 195 200 205
 Ile Pro Gln Asp Pro Ile Asp Asp Ala Met Gly Gly Pro Val Met Pro
 210 215 220
 Gly Asn Pro Leu Met Ala Val Gly Leu Ala Ser Ala Leu Ala Asp Phe
 225 230 235 240
 Gln Gly Ser Gly Pro Glu Glu Met Thr Phe Arg Gly Gly Asp Leu Ile
 245 250 255
 Glu Ile Leu Gly Ala Gln Val Pro Ser Leu Pro Trp Cys Val Gly Arg
 260 265 270
 His Ala Ala Ser Gly Arg Val Gly Phe Val Arg Ser Ser Leu Ile Ser
 275 280 285
 Met Gln Gly Pro Val Ser Glu Leu Glu Ser Ala Ile Phe Leu Asn Glu
 290 295 300
 Glu Glu Lys Ser Phe Phe Ser Glu Gly Cys Phe Ser Glu Glu Asp Ala
 305 310 315 320
 Arg Gln Leu Leu Arg Arg Met Ser Gly Thr Asp Val Cys Ser Val Tyr
 325 330 335
 Ser Leu Asp Ser Val Glu Glu Ala Glu Thr Glu Gln Pro Gln Glu Lys
 340 345 350
 Glu Ile Pro Pro Pro Cys Leu Ser Pro Glu Pro Gln Glu Thr Leu Gln
 355 360 365
 Lys Val Lys Asn Val Leu Glu Gln Cys Lys Thr Cys Pro Gly Cys Pro
 370 375 380
 Gln Glu Pro Ala Ser Trp Gly Leu Cys Ala Ala Ser Ser Asp Val Ser
 385 390 395 400
 Leu Gln Asp Pro Glu Glu Pro Ser Phe Cys Leu Glu Ala Glu Asp Asp
 405 410 415
 Trp Glu Asp Pro Glu Ala Leu Ser Ser Leu Leu Leu Phe Leu Asn Ala
 420 425 430
 Pro Gly Tyr Lys Ala Ser Phe Arg Gly Leu Tyr Asp Val Ala Leu Pro
 435 440 445

Trp Leu Ser Ser Val Phe Arg Ser Phe Ser Asp Glu Glu Glu Leu Thr
 450 455 460
 Gly Arg Leu Ala Gln Ala Arg Gly Ala Ala Lys Lys Ala Gly Leu Leu
 465 470 475 480
 Met Ala Leu Ala Arg Leu Cys Phe Leu Leu Gly Arg Leu Cys Ser Arg
 485 490 495
 Arg Leu Lys Leu Ser Gln Ala Arg Val Tyr Phe Glu Glu Ala Leu Gly
 500 505 510
 Ala Leu Glu Gly Ser Phe Gly Asp Leu Phe Leu Val Val Ala Val Tyr
 515 520 525
 Ala Asn Leu Ala Ser Ile Tyr Arg Lys Gln Lys Asn Arg Glu Lys Cys
 530 535 540
 Ala Gln Val Val Pro Lys Ala Met Ala Leu Leu Leu Gly Thr Pro Asp
 545 550 555 560
 His Ile Cys Ser Thr Glu Ala Glu Gly Glu Leu Leu Gln Leu Ala Leu
 565 570 575
 Arg Arg Ala Val Gly Gly Gln Ser Leu Gln Ala Glu Ala Arg Ala Cys
 580 585 590
 Phe Leu Leu Ala Arg His His Val His Leu Lys Gln Pro Glu Glu Ala
 595 600 605
 Leu Pro Phe Leu Glu Arg Leu Leu Leu Leu His Arg Asp Ser Gly Ala
 610 615 620
 Pro Glu Ala Ala Trp Leu Ser Asp Cys Tyr Leu Leu Leu Ala Asp Ile
 625 630 635 640
 Tyr Ser Arg Lys Cys Leu Pro His Leu Val Leu Ser Cys Val Lys Val
 645 650 655
 Ala Ser Leu Arg Thr Arg Gly Ser Leu Ala Gly Ser Leu Arg Ser Val
 660 665 670
 Asn Leu Val Leu Gln Asn Ala Pro Gln Pro His Ser Leu Pro Ala Gln
 675 680 685
 Thr Ser His Tyr Leu Arg Gln Ala Leu Ala Ser Leu Thr Pro Gly Thr
 690 695 700
 Gly Gln Ala Leu Cys Gly Pro Leu Tyr Thr Ser Leu Ala Gln Leu Tyr
 705 710 715 720
 Ser His His Gly Cys His Gly Pro Ala Ile Thr Phe Met Thr Gln Ala
 725 730 735

Val Glu Ala Ser Ala Ile Ala Gly Val Arg Ala Ile Val Asp His Leu
 740 745 750
 Val Ala Leu Ala Trp Leu His Val Leu His Gly Gln Ser Pro Val Ala
 755 760 765
 Leu Asp Ile Leu Gln Ser Val Arg Asp Ala Val Val Ala Ser Glu Asp
 770 775 780
 Gln Glu Gly Val Ile Ala Asn Met Val Ala Val Ala Leu Lys Arg Thr
 785 790 795 800
 Gly Arg Thr Arg Gln Ala Ala Glu Ser Tyr Tyr Arg Ala Leu Arg Val
 805 810 815
 Ala Arg Asp Leu Gly Gln Gln Arg Asn Gln Ala Val Gly Leu Ala Asn
 820 825 830
 Phe Gly Ala Leu Cys Leu His Ala Gly Ala Ser Arg Leu Ala Gln His
 835 840 845
 Tyr Leu Leu Glu Ala Val Arg Leu Phe Ser Arg Leu Pro Leu Gly Glu
 850 855 860
 Cys Gly Arg Asp Phe Thr His Val Leu Leu Gln Leu Gly His Leu Cys
 865 870 875 880
 Thr Arg Gln Gly Pro Ala Gln Gln Gly Lys Gly Tyr Tyr Glu Trp Ala
 885 890 895
 Leu Leu Val Ala Val Glu Met Gly His Val Glu Ser Gln Leu Arg Ala
 900 905 910
 Val Gln Arg Leu Cys His Phe Tyr Ser Ala Val Met Pro Ser Glu Ala
 915 920 925
 Gln Cys Val Ile Tyr His Glu Leu Gln Leu Ser Leu Ala Cys Lys Val
 930 935 940
 Ala Asp Lys Val Leu Glu Gly Gln Leu Leu Glu Thr Ile Ser Gln Leu
 945 950 955 960
 Tyr Leu Ser Leu Gly Thr Glu Arg Ala Tyr Lys Ser Ala Leu Asp Tyr
 965 970 975
 Thr Lys Arg Ser Leu Gly Ile Phe Ile Asp Leu Gln Lys Lys Glu Lys
 980 985 990
 Glu Ala His Ala Trp Leu Gln Ala Gly Lys Ile Tyr Tyr Ile Leu Arg
 995 1000 1005
 Gln Ser Glu Leu Val Asp Leu Tyr Ile Gln Val Ala Gln Asn Val Ala
 1010 1015 1020

Leu Tyr Thr Gly Asp Pro Asn Leu Gly Leu Glu Leu Phe Glu Ala Ala
 1025 1030 1035 1040
 Gly Asp Ile Phe Phe Asp Gly Ala Trp Glu Arg Glu Lys Ala Val Ser
 1045 1050 1055
 Phe Tyr Arg Asp Arg Ala Leu Pro Leu Ala Val Thr Thr Gly Asn Arg
 1060 1065 1070
 Lys Ala Glu Leu Arg Leu Cys Asn Lys Leu Val Ala Leu Leu Ala Thr
 1075 1080 1085
 Leu Glu Glu Pro Gln Glu Gly Leu Glu Phe Ala His Met Ala Leu Ala
 1090 1095 1100
 Leu Ser Ile Thr Leu Gly Asp Arg Leu Asn Glu Arg Val Ala Tyr His
 1105 1110 1115 1120
 Arg Leu Ala Ala Leu Gln His Arg Leu Gly His Gly Glu Leu Ala Glu
 1125 1130 1135
 His Phe Tyr Leu Lys Ala Leu Ser Leu Cys Asn Ser Pro Leu Glu Phe
 1140 1145 1150
 Asp Glu Glu Thr Leu Tyr Tyr Val Lys Val Tyr Leu Val Leu Gly Asp
 1155 1160 1165
 Ile Ile Phe Tyr Asp Leu Lys Asp Pro Phe Asp Ala Ala Gly Tyr Tyr
 1170 1175 1180
 Gln Leu Ala Leu Ala Ala Ala Val Asp Leu Gly Asn Lys Lys Ala Gln
 1185 1190 1195 1200
 Leu Lys Ile Tyr Thr Arg Leu Ala Thr Ile Tyr His Asn Phe Leu Leu
 1205 1210 1215
 Asp Arg Glu Lys Ser Leu Phe Phe Tyr Gln Lys Ala Arg Thr Phe Ala
 1220 1225 1230
 Thr Glu Leu Asn Val Arg Arg Val Asn Leu Pro Pro Leu Pro Leu Cys
 1235 1240 1245
 Gly Trp Ala Pro Trp Leu Ala Pro Ser His Pro Arg
 1250 1255 1260

<210> 4055

<211> 152

<212> PRT

<213> Homo sapiens

<400> 4055

Met Gly Phe Ala Glu Ala Phe Leu Glu His Leu Trp Lys Asn Leu Gln
 1 5 10 15
 Asp Pro Ser Asn Pro Ala Ile Ile Arg Gln Ala Ala Gly Asn Tyr Ile
 20 25 30
 Gly Ser Phe Leu Ala Arg Ala Lys Phe Ile Ser Leu Ile Thr Val Lys
 35 40 45
 Pro Cys Leu Asp Leu Leu Val Asn Trp Leu His Ile Tyr Leu Asn Asn
 50 55 60
 Gln Asp Ser Gly Thr Lys Ala Phe Cys Asp Val Ala Leu His Gly Pro
 65 70 75 80
 Phe Tyr Ser Ala Cys Gln Ala Val Phe Tyr Thr Phe Val Phe Arg His
 85 90 95
 Lys Gln Leu Leu Ser Gly Asn Leu Lys Glu Gly Leu Gln Tyr Pro Gln
 100 105 110
 Ser Leu Asn Phe Glu Arg Ile Val Met Ser Gln Leu Asn Pro Leu Lys
 115 120 125
 Ile Cys Leu Pro Ser Val Val Asn Phe Phe Ala Ala Ile Thr Lys Met
 130 135 140
 Lys Thr Cys Gly Tyr Gly Trp Trp
 145 150

<210> 4056

<211> 102

<212> PRT

<213> Homo sapiens

<400> 4056

Met Leu Leu Cys Trp Leu Ser Leu Pro His Arg Lys Val Phe Ser Phe
 1 5 10 15
 Leu Phe Phe Ser Phe Phe Leu Phe Phe Phe Phe Phe Leu Arg Arg
 20 25 30
 Thr Leu Pro Leu Leu Thr Arg Leu Glu Cys Ser Gly Thr Ile Ser Ala
 35 40 45

His His Asn Leu Arg Leu Leu Gly Ser Ser Asp Ser Pro Ala Leu Ala
 50 55 60
 Ser Arg Val Ala Gly Thr Met Gly Ala His Tyr His Ala Trp Leu Ile
 65 70 75 80
 Phe Val Phe Leu Val Glu Thr Lys Phe His Tyr Val Gly Lys Ala Gly
 85 90 95
 Leu Lys Leu Leu Thr Ser
 100

<210> 4057

<211> 143

<212> PRT

<213> Homo sapiens

<400> 4057

Met Pro Val Ile Pro Ala Leu Trp Glu Ala Glu Ala Gly Gly Ser Leu
 1 5 10 15
 Glu Val Arg Gly Ser Gly Pro Ala Trp Pro Thr Trp Trp Asn Pro Val
 20 25 30
 Ser Thr Lys Asn Thr Lys Val Ser Trp Met Trp Trp Arg Val Pro Val
 35 40 45
 Val Pro Ala Ala Arg Glu Ala Glu Ala Gly Glu Ala Leu Glu Pro Gly
 50 55 60
 Arg Arg Arg Leu Gln Trp Ala Glu Val Val Ser Leu His Ser Ser Leu
 65 70 75 80
 Gly Val Thr Val Arg Ile Cys Leu Lys Lys Arg Lys Lys Lys Lys Lys
 85 90 95
 Asn Pro Arg Lys Asn Lys Glu Thr Gln Met Leu Gly Val Gly Ile Asn
 100 105 110
 Tyr Met Thr Pro Tyr Arg Cys Gln Pro Leu His Pro Ser Leu Phe Gln
 115 120 125
 Thr Pro Cys Arg Val Ser Tyr Val Leu Arg Leu Leu Lys Asn Lys
 130 135 140

<210> 4058

<211> 122

<212> PRT

<213> Homo sapiens

<400> 4058

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Met Arg Lys His Ile Lys Glu Arg Glu Leu Ser Leu Met Glu Gln Ile
 1             5             10             15
Lys Glu Phe Ile Leu Glu Arg Asn Thr Met Asn Val Pro Thr Val Gly
      20             25             30
Lys Pro Phe Ser Gly Arg His Ser Leu Leu Ser Ile Arg Glu Phe Thr
      35             40             45
Leu Gly Arg Ser Pro Met Asn Val Met Asn Val Gly Glu Pro Ser Glu
      50             55             60
Lys Lys Pro Thr Cys Met Ile Ile Arg Glu Phe Ile Leu Glu Lys Asn
      65             70             75             80
Pro Ile Leu Val Arg Asn Val Gly Lys Thr Ser Ala Glu Val Gln Leu
      85             90             95
Leu Leu Asn Thr Arg Glu Phe Ile Leu Glu Ile Asn Ser Arg Asn Arg
      100            105            110
Glu Ile Lys Glu Phe Ala Glu Cys Phe Ser
      115            120

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<210> 4059

<211> 132

<212> PRT

<213> Homo sapiens

<400> 4059

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Met Glu Ile Ser Ala Pro Ser Gln Gln Arg Gln Gln Ile Ala Glu Ile
 1             5             10             15
Glu Lys Gln Thr Lys Glu Gln Ser Gln Leu Thr Ala Thr Gln Thr Arg
      20             25             30
Thr Val Asn Lys His Gly Asp Glu Ile Ile Thr Ser Thr Thr Ser Asn
      35             40             45

```

Tyr Glu Thr Gln Thr Phe Ser Ser Lys Thr Glu Trp Arg Val Arg Ala
 50 55 60
 Ile Ser Ala Ala Asn Leu His Leu Arg Thr Asn His Ile Tyr Val Ser
 65 70 75 80
 Ser Asp Asp Ile Lys Glu Thr Gly Tyr Thr Tyr Ile Leu Pro Lys Asn
 85 90 95
 Val Leu Lys Lys Phe Ile Cys Ile Ser Asp Leu Arg Ala Gln Val Ser
 100 105 110
 Lys Trp Thr Gln Leu Gly His Ser Val Cys Pro Thr His Phe Val Pro
 115 120 125
 Lys Thr Gln Thr
 130

<210> 4060

<211> 271

<212> PRT

<213> Homo sapiens

<400> 4060

Met Ala Ala Val Glu Lys Arg Arg Gln Ala Val Pro Pro Pro Ala Gly
 1 5 10 15
 Phe Thr Asp Ser Gly Arg Gln Ser Val Ser Arg Ala Ala Gly Ala Ala
 20 25 30
 Glu Ser Glu Glu Asp Phe Leu Arg Gln Val Gly Val Thr Glu Met Leu
 35 40 45
 Arg Ala Ala Leu Leu Lys Val Leu Glu Ala Arg Pro Glu Glu Pro Ile
 50 55 60
 Ala Phe Leu Ala His Tyr Phe Glu Asn Met Gly Leu Arg Ser Pro Val
 65 70 75 80
 Asn Gly Gly Ala Gly Glu Pro Pro Gly Gln Leu Leu Leu Gln Gln Gln
 85 90 95
 Arg Leu Gly Arg Ala Leu Trp His Leu Arg Leu Ala His His Ser Gln
 100 105 110
 Arg Ala Ala Phe Asn Asn Asn Val Ser Val Ala Tyr Glu Cys Leu Ser
 115 120 125

Ala Gly Gly Arg Arg Lys Arg Pro Gly Leu Asp Gly Arg Thr Tyr Ser
 130 135 140
 Glu Leu Leu Arg Arg Ile Cys Arg Asp Gly Gln Ala Pro Glu Glu Val
 145 150 155 160
 Val Ala Pro Leu Leu Arg Lys Val Gln Cys Arg Asp His Glu Ala Val
 165 170 175
 Pro Leu Ser Val Phe Arg Ala Gly Thr Leu Thr Cys Phe Val Leu Leu
 180 185 190
 Glu Phe Val Ala Arg Ala Gly Ala Leu Phe Gln Leu Leu Glu Asp Ser
 195 200 205
 Ala Ala Ala Val Ala Asp Arg Arg Val Gly Gln Ala Val Leu Asp Thr
 210 215 220
 Leu Glu Gly Ala Leu Gln Ala Ser Asp Ala Ala Ala Pro Ala Arg Phe
 225 230 235 240
 Leu Glu Ala Gly Ser Arg Leu Ala Pro Met Thr Arg Glu Glu Phe Leu
 245 250 255
 Glu Arg Ala Ala Ala Leu Phe Ile Ala Lys Val Lys Pro Val Gly
 260 265 270

<210> 4061

<211> 167

<212> PRT

<213> Homo sapiens

<400> 4061

Met Glu Ala Pro His Pro Phe His Ser Gly Val Ala Ala Thr His His
 1 5 10 15
 Lys Ser Thr Phe Arg Ser Glu Leu Phe Arg Gly Gly Ser Arg Gln Phe
 20 25 30
 Val Ser Pro Gly Arg Pro Ala Gly Phe Pro Ala Cys Cys Gly Leu Ser
 35 40 45
 Val Gly Pro Thr Gly Ala Gly Glu Gly Trp Arg Gly Leu Ala Gly Thr
 50 55 60
 Arg Gly Ala Glu Pro Ala Leu Ala Lys Pro Ser Ser Glu Glu Arg Arg

65 70 75 80
 Leu Trp Leu Arg Ala Leu Arg Ser Gln Val Ala Gly Ser Ser Arg Gly
 85 90 95
 Ser Gly Pro Val Pro Ser Ala Asp Pro Gly Ser Arg Ala Leu Val Val
 100 105 110
 Ser Ala Gly Gly Lys Val Thr Arg Ser Gly Arg Arg Arg Arg Val Arg
 115 120 125
 Gly Ala Glu Arg Gly Lys Glu Arg Val Gln Arg Ala Gly Glu Ser Phe
 130 135 140
 Arg Lys Ser Gly Arg Gly Arg Tyr Leu Pro Val Pro Ser Pro Arg Ala
 145 150 155 160
 Thr Arg Gln Ile Gly Glu Gly
 165

<210> 4062

<211> 122

<212> PRT

<213> Homo sapiens

<400> 4062

Met Phe Phe Cys His Gly Phe Ser Trp Ser Leu His Leu Gly Pro Leu
 1 5 10 15
 Thr Ser His Asn Thr Asp Gln Arg Gly Glu Thr Pro Ser Leu Leu Lys
 20 25 30
 Val Gln Gly Ser Ala Glu Cys Ala Gly Ala Ser Leu Glu Ser Gln Leu
 35 40 45
 Leu Gly Arg Leu Arg Arg Glu Asn Arg Leu Asn Pro Gly Gly Trp Gly
 50 55 60
 Cys Ser Glu Leu Arg Ser Cys His Cys Thr Pro Ala Trp Arg Gln Ser
 65 70 75 80
 Lys Thr Pro Phe Gln Thr Asn Lys Gln Met Asn Ile Ala Ile Ile Leu
 85 90 95
 Lys Tyr Tyr Val Arg Ile Lys Tyr Val Ile Phe Arg Phe Leu Leu Met
 100 105 110
 Tyr Asn Met His Thr Glu Ile His Pro Gln

115

120

<210> 4063

<211> 142

<212> PRT

<213> Homo sapiens

<400> 4063

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Met Pro Val Phe Ser Ala Ser Gln Val Ala Gly Ile Thr Gly Val His
  1             5             10             15
His His Ala Gly Leu Asn Phe Phe Val Phe Leu Val Glu Thr Gly Phe
             20             25             30
Leu Tyr Val Gly Gln Ala Asp Leu Glu Leu Pro Thr Ser Gly Asp Pro
             35             40             45
Pro Ala Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Val Ser His Cys
             50             55             60
Thr Arg Leu Ser Leu Val Leu Arg His Leu Leu Asp Thr Pro Ser Leu
             65             70             75             80
Arg Ala Glu Arg Ser Pro Arg Pro Val Pro Arg Asp Lys Ala Gln Gly
             85             90             95
Arg Val Tyr Leu Gly Ser Arg Gly Gly Glu Gly Val Glu Lys Ala Glu
             100            105            110
Leu Glu Ser Ile Thr Leu Pro Thr Asn His Gln Thr Ala Gly Thr Leu
             115            120            125
Gln Pro Asn Ala Gly Arg Arg Thr Trp Arg Val Ser Leu Cys
             130            135            140

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<210> 4064

<211> 160

<212> PRT

<213> Homo sapiens

<400> 4064

Met Phe Ala Pro Leu His Ser Gly Leu Asp Asp Arg Val Arg Leu Cys
 1 5 10 15
 Leu Lys Lys Lys Lys Ile Ile Ile Thr Asn Leu Ala Asn Gly Arg Leu
 20 25 30
 Phe Lys Leu Thr Cys Val Phe Leu Thr His Pro His His Phe Phe Thr
 35 40 45
 Arg Phe Leu Ala Phe Trp His Lys Ile Val Phe Phe Leu Cys Ser Asn
 50 55 60
 Pro Gly Ile Ser His Phe Pro Arg Glu Leu Trp Ile Leu Leu Val Glu
 65 70 75 80
 Ser Leu Asn Leu Gly Ile Leu Gln Asp Leu Asp Ala Arg Cys Ala His
 85 90 95
 Cys His Trp Gly Ala Thr Ala Leu His Ala Leu Ser Gly His Ser Gln
 100 105 110
 Gly Met Cys Val Cys Ser Phe Leu Cys Gly Met Lys Thr Met Cys Ser
 115 120 125
 Trp Cys Tyr Leu Met Thr Glu Val Ile Phe Ile Phe Ser Leu Ser Met
 130 135 140
 Phe Val Ala Leu Leu Ser Asp Gly Glu Lys Pro Gly Phe Tyr Tyr Leu
 145 150 155 160

<210> 4065

<211> 409

<212> PRT

<213> Homo sapiens

<400> 4065

Met Glu Glu Ser Trp Glu Ala Ala Pro Gly Gly Gln Ala Gly Ala Glu
 1 5 10 15
 Leu Pro Met Glu Pro Val Gly Ser Leu Val Pro Thr Leu Glu Gln Pro
 20 25 30
 Gln Val Pro Ala Lys Val Arg Gln Pro Glu Gly Pro Glu Ser Ser Pro
 35 40 45
 Ser Pro Ala Gly Ala Val Glu Lys Ala Ala Gly Ala Gly Leu Glu Pro
 50 55 60

Ser Ser Lys Lys Lys Pro Pro Ser Pro Arg Pro Gly Ser Pro Arg Val
 65 70 75 80
 Pro Pro Leu Ser Leu Gly Tyr Gly Val Cys Pro Glu Pro Pro Ser Pro
 85 90 95
 Gly Pro Ala Leu Val Lys Leu Pro Arg Asn Gly Glu Ala Pro Gly Ala
 100 105 110
 Glu Pro Ala Pro Ser Ala Trp Ala Pro Met Glu Leu Gln Val Asp Val
 115 120 125
 Arg Val Lys Pro Val Gly Ala Ala Gly Gly Ser Ser Thr Pro Ser Pro
 130 135 140
 Arg Pro Ser Thr Arg Phe Leu Lys Val Pro Val Pro Glu Ser Pro Ala
 145 150 155 160
 Phe Ser Arg His Ala Asp Pro Ala His Gln Leu Leu Leu Arg Ala Pro
 165 170 175
 Ser Gln Gly Gly Thr Trp Gly Arg Arg Ser Pro Leu Ala Ala Ala Arg
 180 185 190
 Thr Glu Ser Gly Cys Asp Ala Glu Gly Arg Ala Ser Pro Ala Glu Gly
 195 200 205
 Ser Ala Gly Ser Pro Gly Ser Pro Thr Cys Cys Arg Cys Lys Glu Leu
 210 215 220
 Gly Leu Glu Lys Glu Asp Ala Ala Leu Leu Pro Arg Ala Gly Leu Asp
 225 230 235 240
 Gly Asp Glu Lys Leu Pro Arg Ala Val Thr Leu Thr Gly Leu Pro Met
 245 250 255
 Tyr Val Lys Ser Leu Tyr Trp Ala Leu Ala Phe Met Ala Val Leu Leu
 260 265 270

 Ala Val Ser Gly Val Val Ile Val Val Leu Ala Ser Arg Ala Gly Ala
 275 280 285
 Arg Cys Gln Gln Cys Pro Pro Gly Trp Val Leu Ser Glu Glu His Cys
 290 295 300
 Tyr Tyr Phe Ser Ala Glu Ala Gln Ala Trp Glu Ala Ser Gln Ala Phe
 305 310 315 320
 Cys Ser Ala Tyr His Ala Thr Leu Pro Leu Leu Ser His Thr Gln Asp
 325 330 335
 Phe Leu Gly Arg Tyr Pro Val Ser Arg His Ser Trp Val Gly Ala Trp

340 345 350
 Arg Gly Pro Gln Gly Trp His Trp Ile Asp Glu Ala Pro Leu Pro Pro
 355 360 365
 Gln Leu Leu Pro Glu Asp Gly Glu Asp Asn Leu Asp Ile Asn Cys Gly
 370 375 380
 Ala Leu Glu Glu Gly Thr Leu Val Ala Ala Asn Cys Ser Thr Pro Arg
 385 390 395 400
 Pro Trp Val Cys Ala Lys Gly Thr Gln
 405

<210> 4066

<211> 120

<212> PRT

<213> Homo sapiens

<400> 4066

Met Arg Cys Leu Arg Leu Arg Gln Ser Ser Leu Glu Pro Val Ala Phe
 1 5 10 15
 Arg Leu Pro Arg Val Arg Lys Glu Phe Phe Gln Asp Asp Val Phe Pro
 20 25 30
 Asp Thr Ala Val Ile Trp Glu Pro Val Leu Ser Ala Glu Ala Trp Leu
 35 40 45
 Gln Gly Ala Asn Gly Gln Pro Trp Leu Leu Ser Leu Gln Pro Pro Asp
 50 55 60
 Met Ser Pro Val Ser Gln Ala Pro Arg Glu Ala Pro Ala Arg Arg Ala
 65 70 75 80
 Pro Ser Ser Ala Gln Tyr Leu Glu Glu Lys Ser Asp Gln Gln Lys Lys
 85 90 95
 Glu Glu Val Gly Met Gly Glu Ser Ser Cys Ala Glu Val Thr Glu Ser
 100 105 110
 Trp Leu His Leu Ala Thr Ala Pro
 115 120

<210> 4067

<211> 507

<212> PRT

<213> Homo sapiens

<400> 4067

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Met Ala Glu Leu Asp Gln Leu Pro Asp Glu Ser Ser Ser Ala Lys Ala
  1             5             10             15
Leu Val Ser Leu Lys Glu Gly Ser Leu Ser Asn Thr Trp Asn Glu Lys
      20             25             30
Tyr Ser Ser Leu Gln Lys Thr Pro Val Trp Lys Gly Arg Asn Thr Ser
      35             40             45
Ser Ala Val Glu Met Lys Phe Thr Ala Thr Met Ser Thr Pro Asp Lys
      50             55             60
Lys Ala Ser Gln Lys Ile Gly Phe Arg Leu Arg Asn Leu Leu Lys Leu
      65             70             75             80
Pro Lys Ala His Lys Trp Cys Ile Tyr Glu Trp Phe Tyr Ser Asn Ile
      85             90             95
Asp Lys Pro Leu Phe Glu Gly Asp Asn Asp Phe Cys Val Cys Leu Lys
      100            105            110
Glu Ser Phe Pro Asn Leu Lys Thr Arg Lys Leu Thr Arg Val Glu Trp
      115            120            125
Gly Lys Ile Arg Arg Leu Met Gly Lys Pro Arg Arg Cys Ser Ser Ala
      130            135            140
Phe Phe Glu Glu Glu Arg Ser Ala Leu Lys Gln Lys Arg Gln Lys Ile
      145            150            155            160
Arg Leu Leu Gln Gln Arg Lys Val Ala Asp Val Ser Gln Phe Lys Asp
      165            170            175
Leu Pro Asp Glu Ile Pro Leu Pro Leu Val Ile Gly Thr Lys Val Thr
      180            185            190
Ala Arg Leu Arg Gly Val His Asp Gly Leu Phe Thr Gly Gln Ile Asp
      195            200            205
Ala Val Asp Thr Leu Asn Ala Thr Tyr Arg Val Thr Phe Asp Arg Thr
      210            215            220
Gly Leu Gly Thr His Thr Ile Pro Asp Tyr Glu Val Leu Ser Asn Glu
      225            230            235            240
Pro His Glu Thr Met Pro Ile Ala Ala Phe Gly Gln Lys Gln Arg Pro

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	245		250		255
Ser Arg Phe Phe Met Thr Pro Pro Arg Leu His Tyr Thr Pro Pro Leu					
	260		265		270
Gln Ser Pro Ile Ile Asp Asn Asp Pro Leu Leu Gly Gln Ser Pro Trp					
	275		280		285
Arg Ser Lys Ile Ser Gly Ser Asp Thr Glu Thr Leu Gly Gly Phe Pro					
	290		295		300
Val Glu Phe Leu Ile Gln Val Thr Arg Leu Ser Lys Ile Leu Met Ile					
305		310		315	320
Lys Lys Glu His Ile Lys Lys Leu Arg Glu Met Asn Thr Glu Ala Glu					
	325		330		335
Lys Leu Lys Ser Tyr Ser Met Pro Ile Ser Ile Glu Phe Gln Arg Arg					
	340		345		350
Tyr Ala Thr Ile Val Leu Glu Leu Glu Gln Leu Asn Lys Asp Leu Asn					
	355		360		365
Lys Val Leu His Lys Val Gln Gln Tyr Cys Tyr Glu Leu Ala Pro Asp					
	370		375		380
Gln Gly Leu Gln Pro Ala Asp Gln Pro Thr Asp Met Arg Arg Arg Cys					
385		390		395	400
Glu Glu Glu Ala Gln Glu Ile Val Arg His Ala Asn Ser Ser Thr Gly					
	405		410		415
Gln Pro Cys Val Glu Asn Glu Asn Leu Thr Asp Leu Ile Ser Arg Leu					
	420		425		430
Thr Ala Ile Leu Leu Gln Ile Lys Cys Leu Ala Glu Gly Gly Asp Leu					
	435		440		445
Asn Ser Phe Glu Phe Lys Ser Leu Thr Asp Ser Leu Asn Asp Ile Lys					
	450		455		460
Ser Thr Ile Asp Ala Ser Asn Ile Ser Cys Phe Gln Asn Asn Val Glu					
465		470		475	480
Ile His Val Ala His Ile Gln Ser Gly Leu Ser Gln Met Gly Asn Leu					
	485		490		495
His Ala Phe Ala Ala Asn Asn Thr Asn Arg Asp					
	500		505		

<211> 601

<212> PRT

<213> Homo sapiens

<400> 4068

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Met Ala Ala Leu Thr Pro Arg Lys Arg Lys Gln Asp Ser Leu Lys Cys
  1              5              10              15
Asp Ser Leu Leu His Phe Thr Glu Asn Leu Phe Pro Ser Pro Asn Lys
      20              25              30
Lys His Cys Phe Tyr Gln Asn Ser Asp Lys Asn Glu Glu Asn Leu His
      35              40              45
Cys Ser Gln Gln Glu His Phe Val Leu Ser Ala Leu Lys Thr Thr Glu
      50              55              60
Ile Asn Arg Leu Pro Ser Ala Asn Gln Gly Ser Pro Phe Lys Ser Ala
      65              70              75              80
Leu Ser Thr Val Ser Phe Tyr Asn Gln Asn Lys Trp Tyr Leu Asn Pro
      85              90              95
Leu Glu Arg Lys Leu Ile Lys Glu Ser Arg Ser Thr Cys Leu Lys Thr
      100             105             110
Asn Asp Glu Asp Lys Ser Phe Pro Ile Val Thr Glu Lys Met Gln Gly
      115             120             125
Lys Pro Val Cys Ser Lys Lys Asn Asn Lys Lys Pro Gln Lys Ser Leu
      130             135             140
Thr Ala Lys Tyr Gln Pro Lys Tyr Arg His Ile Lys Pro Val Ser Arg
      145             150             155             160
Asn Ser Arg Asn Ser Lys Gln Asn Arg Val Ile Tyr Lys Pro Ile Val
      165             170             175
Glu Lys Glu Asn Asn Cys His Ser Ala Glu Asn Asn Ser Asn Ala Pro
      180             185             190
Arg Val Leu Ser Gln Lys Ile Lys Pro Gln Val Thr Leu Gln Gly Gly
      195             200             205
Ala Ala Phe Phe Val Arg Lys Lys Ser Ser Leu Arg Lys Ser Ser Leu
      210             215             220
Glu Asn Glu Pro Ser Leu Gly Arg Thr Gln Lys Ser Lys Ser Glu Val
      225             230             235             240
Ile Glu Asp Ser Asp Val Glu Thr Val Ser Glu Lys Lys Thr Phe Ala

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	245		250		255
Thr Arg Gln Val Pro Lys Cys Leu Val Leu Glu Glu Lys Leu Lys Ile					
	260		265		270
Gly Leu Leu Ser Ala Ser Ser Lys Asn Lys Glu Lys Leu Ile Lys Asp					
	275		280		285
Ser Ser Asp Asp Arg Val Ser Ser Lys Glu His Lys Val Asp Lys Asn					
	290		295		300
Glu Ala Phe Ser Ser Glu Asp Ser Leu Gly Glu Asn Lys Thr Ile Ser					
305		310		315	320
Pro Lys Ser Thr Val Tyr Pro Ile Phe Ser Ala Ser Ser Val Asn Ser					
	325		330		335
Lys Arg Ser Leu Gly Glu Glu Gln Phe Ser Val Gly Ser Val Asn Phe					
	340		345		350
Met Lys Gln Thr Asn Ile Gln Lys Asn Thr Asn Thr Arg Asp Thr Ser					
	355		360		365
Lys Lys Thr Lys Asp Gln Leu Ile Ile Asp Ala Gly Gln Lys His Phe					
	370		375		380
Gly Ala Thr Val Cys Lys Ser Cys Gly Met Ile Tyr Thr Ala Ser Asn					
385		390		395	400
Pro Glu Asp Glu Met Gln His Val Gln His His His Arg Phe Leu Glu					
	405		410		415
Gly Ile Lys Tyr Val Gly Trp Lys Lys Glu Arg Val Val Ala Glu Phe					
	420		425		430
Trp Asp Gly Lys Ile Val Leu Val Leu Pro His Asp Pro Ser Phe Ala					
	435		440		445
Ile Lys Lys Val Glu Asp Val Gln Glu Leu Val Asp Asn Glu Leu Gly					
	450		455		460
Phe Gln Gln Val Val Pro Lys Cys Pro Asn Lys Ile Lys Thr Phe Leu					
465		470		475	480
Phe Ile Ser Asp Glu Lys Arg Val Val Gly Cys Leu Ile Ala Glu Pro					
	485		490		495
Ile Lys Gln Ala Phe Arg Val Leu Ser Glu Pro Ile Gly Pro Glu Ser					
	500		505		510
Pro Ser Ser Thr Glu Cys Pro Arg Ala Trp Gln Cys Ser Asp Val Pro					
	515		520		525
Glu Pro Ala Val Cys Gly Ile Ser Arg Ile Trp Val Phe Arg Leu Lys					

530 535 540
 Arg Arg Lys Arg Ile Ala Arg Arg Leu Val Asp Thr Leu Arg Asn Cys
 545 550 555 560
 Phe Met Phe Gly Cys Phe Leu Ser Thr Asp Glu Ile Ala Phe Ser Asp
 565 570 575
 Pro Thr Pro Asp Gly Lys Leu Phe Ala Thr Lys Tyr Cys Asn Thr Pro
 580 585 590
 Asn Phe Leu Val Tyr Asn Phe Asn Ser
 595 600

<210> 4069

<211> 125

<212> PRT

<213> Homo sapiens

<400> 4069

Met Gln Leu Arg Phe Arg Gly His Ser Ile Asn His Ser Leu Tyr Met
 1 5 10 15
 His Asn Ser Ser Gly Gly Ser Arg Val Ile Ile Ala Ser Arg Ser Gln
 20 25 30
 Ile Ser Tyr Phe Phe Ile Asn Ile Glu Thr Lys Leu Trp Ser Gln Ile
 35 40 45
 Val Asn Glu Arg Lys Ile His Tyr Ile Leu Glu Lys Glu Ala Asn Asp
 50 55 60
 Val Asn Lys Asp Glu Glu Val Glu Asp Gly His Arg Asn Cys Gln Arg
 65 70 75 80

 Arg Arg Trp Arg Lys Met Arg Pro Arg Gly Glu Thr Glu Ser Thr His
 85 90 95
 Phe Ser Val Gly Phe Pro Ser Met Ser Pro Lys Ser Lys Gly Gln Pro
 100 105 110
 Gly Ala Ser Pro Gln Ile Ile Leu Ala Ala Asp Ser Gln
 115 120 125

<210> 4070

<211> 179

<212> PRT

<213> Homo sapiens

<400> 4070

```

Met Gly Pro Ala Ala Ala Pro Gly His Leu Ser Ser Gly Gly Cys Cys
  1              5              10              15
Val Leu Pro Leu Pro Ser Val Leu Pro Pro Ser Ile Ser Ala Val Pro
      20              25              30
Gly Leu Ala Leu Leu Pro Gly Arg Trp Thr Leu Pro Ser Gln Trp Thr
      35              40              45
Arg Arg Leu Ala Ala Ser Ala Pro Pro Asp Arg Ser Pro Tyr Leu Ser
      50              55              60
Pro Arg Leu Gln Ser Pro Val Pro Thr Ala Ala His Val Ala Ser Phe
      65              70              75              80
Gln Ala Ala Ala Arg Ala Ser Gly Thr Ser Gly Ala Ser Thr Val Ala
      85              90              95
Cys Gly His Gly Pro Arg Ser Phe Ser Pro Leu Ser Ser Ser Ser Arg
      100             105             110
Ala Gly Pro Arg Val Ser Pro Gln Pro Asp Trp Leu Cys Leu Gln Met
      115             120             125
Met Leu Val Thr Gln Leu Phe Val Ser Arg Asn Ala Gly Gly Ile Ala
      130             135             140
Val Pro Phe Ser Gly Ser Ala Ala Phe Ser Leu Ala Val Ile Pro Pro
      145             150             155             160
Gly Glu Ala His Leu Gly Arg Phe Trp Ala Thr Ala Val Trp Leu His
      165             170             175
Ser Gly Gln

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<210> 4071

<211> 157

<212> PRT

<213> Homo sapiens

<400> 4071

Met Gly Gly Ala Trp Ser Glu Ala Gln Glu Ala Asp Gly Gly Gly His
 1 5 10 15
 Gln Gly Gln Glu Ala Ser Asn Pro Pro Leu Arg Ala Thr Pro Ser Leu
 20 25 30
 Pro Gly Gly Gln Cys Leu Tyr Gly Leu Lys Ala Gly Pro Trp Gly Thr
 35 40 45
 Thr Ala Asp Phe Cys Phe Asn Trp Lys Gln Thr Gly Ile Asn Phe Pro
 50 55 60
 Tyr Lys Tyr Ser Ala Asn Asn Leu Glu Val Tyr Lys Gly Lys Ser Glu
 65 70 75 80
 Gly Ser Thr Gln Pro Ser Cys Pro Thr Phe Thr Leu Thr Gly Asn Gln
 85 90 95
 Leu Leu Val Val Leu Val Gly Pro Ser Arg His Phe Met Cys Ala Phe
 100 105 110
 Thr Asn Ile Met His Ser Tyr Val Phe Leu Lys Gly Lys Gln Arg Pro
 115 120 125
 Gly Ala Val Ala Asp Ala Cys Asn Pro Ser Thr Leu Gly Gly Arg Gly
 130 135 140
 Gly Arg Ile Thr Arg Ser Gly Asp Gly Asp His Pro Gly
 145 150 155

<210> 4072

<211> 121

<212> PRT

<213> Homo sapiens

<400> 4072

Met Ser Arg Trp Leu Trp Pro Trp Ser Asn Cys Val Lys Glu Arg Val
 1 5 10 15
 Cys Arg Tyr Leu Leu His His Tyr Leu Gly His Phe Phe Gln Glu His
 20 25 30
 Leu Ser Leu Asp Gln Leu Ser Leu Asp Leu Tyr Lys Gly Ser Val Ala
 35 40 45

Leu Arg Asp Ile His Leu Glu Ile Trp Val Arg Ser Gln Ala Arg Val
 50 55 60
 Gln Glu Val Cys Glu Arg Gly Ala Gly Val Asn Gly Val Thr Ala Gly
 65 70 75 80
 Ala Gly Gly Arg Leu Arg Gly Leu His Arg Gly Gly Arg Ala Leu Gly
 85 90 95
 Cys Ser Ala His Arg Pro Leu His Ser Ala Arg Val Arg Pro Pro Ala
 100 105 110
 His Leu Ala Ala Pro Pro Gly Ser Arg
 115 120

<210> 4073

<211> 129

<212> PRT

<213> Homo sapiens

<400> 4073

Met Arg Ser Leu Leu Ile Leu Ser Trp Asp Ser Trp Ser Ile Ala Phe
 1 5 10 15
 Leu Ala Gly Asn Leu Cys Gly Gln Trp His Leu Cys Pro Ser Phe Ala
 20 25 30
 Trp Ala Ser Arg Ser Arg His Arg Cys Leu Leu Pro Ala Arg Leu Gln
 35 40 45
 Leu Asp Gln Val Tyr Cys Lys Gln Ala Ala Ser Thr Ala Gly Thr Gly
 50 55 60
 Glu His Gly Gly Gly Gln Lys Leu Gly Asp Thr Arg Asn Cys Arg Ala
 65 70 75 80
 Pro Lys Arg Val Ser Gln Ala Cys Ile Arg Asn Leu Leu Gly Leu Gly
 85 90 95
 Ser Leu Lys Gly His Ser Ser Ser Leu Leu Leu Ser Ser Leu Leu Leu
 100 105 110
 Val Thr Arg Asn Val Ala Ser Lys Gly Cys Val Ser Ala Leu Phe Val
 115 120 125
 Leu

<210> 4074

<211> 226

<212> PRT

<213> Homo sapiens

<400> 4074

```

Met Ala Asp Leu Leu Pro Phe Ala Val Pro Thr Lys Ser Asp Lys Thr
  1             5             10             15
Leu Leu Val Trp Glu Leu Ser Ser Gly Pro Thr Ala Asp Ala Leu Tyr
          20             25             30
Arg Gln Gly Leu Ala Val Leu Leu Met Leu Val Leu Asn Ser Trp Pro
          35             40             45
Gln Ala Ile Leu Pro Ser Trp Pro Pro Arg Glu Gln Asp Tyr Arg Leu
          50             55             60
Phe Leu Leu Glu Val Val Gln Glu Val Glu Glu Ser Thr Ser Asp Glu
          65             70             75             80
Gln Ile Ala Gly Gly Cys Ser His Ser His Val Ser Ala Lys Lys Ser
          85             90             95
Glu Phe Ser Ser His Gln Asn Gln Gly Lys Asp Asn Ala Ala Val Met
          100            105            110
Val Gln Ser Cys Leu Glu Gly Glu Thr Ala Leu Val Phe Pro Ala Leu
          115            120            125
Glu Ile Asn Val Val Pro Leu Asn His Lys Asp Cys Pro Trp Gly Glu
          130            135            140
Glu Gln Arg Pro Gly Trp Thr Gly Asp His Ala Arg Ser Arg Ala Leu
          145            150            155            160
Gln Lys Cys Gln Ser Glu Gly Ser Gly His Arg Leu Gly Pro Phe Gly
          165            170            175
Met Met Gly Lys Phe Ala Lys Val Arg Arg Gln Glu Leu Gly Ser Ser
          180            185            190
Leu Lys Gln Arg Gly Phe Gln Ala Ala Glu Glu Pro Glu Asp Pro Ala
          195            200            205
Ser Ala Pro Asp Thr Val Leu Asp His Leu Phe Pro Phe Pro Ser Cys
          210            215            220

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Leu Phe

225

<210> 4075

<211> 362

<212> PRT

<213> Homo sapiens

<400> 4075

```

Met Lys Pro Thr Glu Gly Trp Lys Trp Thr Leu Asn Ser Arg Lys Ala
  1              5              10              15
Arg Glu Trp Thr Pro Arg Asp Ile Glu Ala Gln Thr Gln Lys Pro Glu
      20              25              30
Pro Pro Glu Ser Ala Glu Lys Leu Leu Glu Ser Pro Gly Val Glu Ala
      35              40              45
Gly Glu Gly Glu Ala Glu Lys Glu Glu Ala Gly Ala Gln Gly Arg Pro
      50              55              60
Leu Arg Ala Leu Gln Asn Cys Cys Ser Val Pro Ser Pro Leu Pro Pro
      65              70              75              80
Glu Asp Ala Gly Thr Gly Gly Leu Arg Gln Gln Glu Glu Glu Ala Val
      85              90              95
Glu Leu Gln Pro Pro Pro Pro Ala Pro Leu Ser Pro Pro Pro Pro Ala
      100             105             110
Pro Thr Ala Pro Gln Pro Pro Gly Asp Pro Leu Met Ser Arg Leu Phe
      115             120             125
Tyr Gly Val Lys Ala Gly Pro Gly Val Gly Ala Pro Arg Arg Ser Gly
      130             135             140
His Thr Phe Thr Val Asn Pro Arg Arg Ser Val Pro Pro Ala Thr Pro
      145             150             155             160
Ala Thr Pro Thr Ser Pro Ala Thr Val Asp Ala Ala Val Pro Gly Ala
      165             170             175
Gly Lys Lys Arg Tyr Pro Thr Ala Glu Glu Ile Leu Val Leu Gly Gly
      180             185             190
Tyr Leu Arg Leu Ser Arg Ser Cys Leu Ala Lys Gly Ser Pro Glu Arg
      195             200             205

```

His His Lys Gln Leu Lys Ile Ser Phe Ser Glu Thr Ala Leu Glu Thr
 210 215 220
 Thr Tyr Gln Tyr Pro Ser Glu Ser Ser Val Leu Glu Arg Arg Arg Ala
 225 230 235 240
 Lys Leu Gly Leu Ser Pro Gly Glu Pro Ser Pro Val Leu Gly Thr Val
 245 250 255
 Glu Ala Gly Pro Pro Asp Pro Asp Glu Ser Ala Val Leu Leu Glu Ala
 260 265 270
 Ile Gly Pro Val His Gln Asn Arg Phe Ile Arg Gln Glu Arg Gln Gln
 275 280 285
 Gln Gln Gln Gln Gln Gln Arg Ser Glu Glu Leu Leu Ala Glu Arg Lys
 290 295 300
 Pro Gly Pro Leu Glu Ala Arg Glu Arg Arg Pro Ser Pro Gly Glu Met
 305 310 315 320
 Arg Asp Gln Ser Pro Lys Gly Arg Glu Ser Arg Glu Glu Asp Glu Glu
 325 330 335
 Glu Leu Leu Leu Leu Gln Pro Glu Leu Gln Gly Gly Leu Arg Thr Lys
 340 345 350
 Ala Leu Ile Val Asp Glu Ser Cys Arg Arg
 355 360

<210> 4076

<211> 115

<212> PRT

<213> Homo sapiens

<400> 4076

Met Pro Leu Pro Ile Asn Thr Ile Gly Cys Leu Leu Ser Tyr Pro Lys
 1 5 10 15
 Pro Phe Asp Thr Ala His Trp Lys Met Glu Phe Met Leu Leu His Gly
 20 25 30
 Leu Gly Phe Ala Thr Cys Leu Thr Phe Thr Val Ser Met Leu Pro Asn
 35 40 45
 Ser Gly Ala Gly Ala Pro Ala Ser Leu His Pro Pro Pro Phe Cys Ile
 50 55 60

Arg Gln Gly Ile Ser Ser Pro Thr Pro Thr Ala Ser Leu Pro Lys Cys
 65 70 75 80
 Leu His Cys Gln Leu Lys Leu Pro Ala Ala His Phe Asn Pro Ala Leu
 85 90 95
 Thr Gly Thr Trp Lys Ser Ser His His Thr Ser Ile Phe Pro Ser Thr
 100 105 110
 Ser Leu Phe
 115

<210> 4077

<211> 515

<212> PRT

<213> Homo sapiens

<400> 4077

Met Val Leu Ser Gln Glu Glu Pro Asp Ser Ala Arg Gly Thr Ser Glu
 1 5 10 15
 Ala Gln Pro Leu Gly Pro Ala Pro Thr Gly Ala Ala Pro Pro Pro Gly
 20 25 30
 Pro Gly Pro Ser Asp Ser Pro Glu Ala Ala Val Glu Lys Val Glu Val
 35 40 45
 Glu Leu Ala Gly Pro Ala Thr Ala Glu Pro His Glu Pro Pro Glu Pro
 50 55 60
 Pro Glu Gly Gly Trp Gly Trp Leu Val Met Leu Ala Ala Met Trp Cys
 65 70 75 80
 Asn Gly Ser Val Phe Gly Ile Gln Asn Ala Cys Gly Val Leu Phe Val
 85 90 95
 Ser Met Leu Glu Thr Phe Gly Ser Lys Asp Asp Asp Lys Met Val Phe
 100 105 110
 Lys Thr Ala Trp Val Gly Ser Leu Ser Met Gly Met Ile Phe Phe Cys
 115 120 125
 Cys Pro Ile Val Ser Val Phe Thr Asp Leu Phe Gly Cys Arg Lys Thr
 130 135 140
 Ala Val Val Gly Ala Ala Val Gly Phe Val Gly Leu Met Ser Ser Ser
 145 150 155 160

Phe Val Ser Ser Ile Glu Pro Leu Tyr Leu Thr Tyr Gly Ile Ile Phe
 165 170 175
 Ala Cys Gly Cys Ser Phe Ala Tyr Gln Pro Ser Leu Val Ile Leu Gly
 180 185 190
 His Tyr Phe Lys Lys Arg Leu Gly Leu Val Asn Gly Ile Val Thr Ala
 195 200 205
 Gly Ser Ser Val Phe Thr Ile Leu Leu Pro Leu Leu Leu Arg Val Leu
 210 215 220
 Ile Asp Ser Val Gly Leu Phe Tyr Thr Leu Arg Val Leu Cys Ile Phe
 225 230 235 240
 Met Phe Val Leu Phe Leu Ala Gly Phe Thr Tyr Arg Pro Leu Ala Thr
 245 250 255
 Ser Thr Lys Asp Lys Glu Ser Gly Gly Ser Gly Ser Ser Leu Phe Ser
 260 265 270
 Arg Lys Lys Phe Ser Pro Pro Lys Lys Ile Phe Asn Phe Ala Ile Phe
 275 280 285
 Lys Val Thr Ala Tyr Ala Val Trp Ala Val Gly Ile Pro Leu Ala Leu
 290 295 300
 Phe Gly Tyr Phe Val Pro Tyr Val His Leu Met Lys His Val Asn Glu
 305 310 315 320
 Arg Phe Gln Asp Glu Lys Asn Lys Glu Val Val Leu Met Cys Ile Gly
 325 330 335
 Val Thr Ser Gly Val Gly Arg Leu Leu Phe Gly Arg Ile Ala Asp Tyr
 340 345 350
 Val Pro Gly Val Lys Lys Val Tyr Leu Gln Val Leu Ser Phe Phe Phe
 355 360 365
 Ile Gly Leu Met Ser Met Met Ile Pro Leu Cys Ser Ile Phe Gly Ala
 370 375 380
 Leu Ile Ala Val Cys Leu Ile Met Gly Leu Phe Asp Gly Cys Phe Ile
 385 390 395 400
 Ser Ile Met Ala Pro Ile Ala Phe Glu Leu Val Gly Ala Gln Asp Val
 405 410 415
 Ser Gln Ala Ile Gly Phe Leu Leu Gly Phe Met Ser Ile Pro Met Thr
 420 425 430
 Val Gly Pro Pro Ile Ala Gly Leu Leu Arg Asp Lys Leu Gly Ser Tyr
 435 440 445

Asp Val Ala Phe Tyr Leu Ala Gly Val Pro Pro Leu Ile Gly Gly Ala
 450 455 460
 Val Leu Cys Phe Ile Pro Trp Ile His Ser Lys Lys Gln Arg Glu Ile
 465 470 475 480
 Ser Lys Thr Thr Gly Lys Glu Lys Met Glu Lys Met Leu Glu Asn Gln
 485 490 495
 Asn Ser Leu Leu Ser Ser Ser Ser Gly Met Phe Lys Lys Glu Ser Asp
 500 505 510
 Ser Ile Ile
 515

<210> 4078

<211> 165

<212> PRT

<213> Homo sapiens

<400> 4078

Met Gly Trp Gly Gly Val Gly Gln Met Glu Gln Gln Pro Gly Glu Arg
 1 5 10 15
 Val Asp Leu Gln Thr Thr Gln Gln Ala Leu Ala Val Ser Ser Met Arg
 20 25 30
 Asn Arg Arg Asp Ile His Gly Thr Pro Cys Arg Lys Glu Glu Glu Glu
 35 40 45
 Lys Ser Tyr Leu Leu Gly Pro Tyr Pro Gly Lys Phe Pro Thr Leu Val
 50 55 60
 Leu Phe Thr Gly Cys Cys Pro Glu Arg Gln Ile Leu Ser Ser Pro Ser
 65 70 75 80
 His Glu Arg Gly Asn Gln Gly Cys Lys Gln Glu Ser Asp Ser Ala Lys
 85 90 95
 Val Thr Gln Leu Glu Ser Gly Arg Asp Gly Thr Gln His Asp Ile Ser
 100 105 110
 Leu Gln Ser Trp Gln Leu Leu Arg Ala Leu Pro Leu Leu Asn Arg Asp
 115 120 125
 Leu Pro Gly Met Thr Arg Arg Pro Ser Gly Phe Ser Gly Leu Val Leu
 130 135 140

Arg Thr Phe Ile Arg Phe Phe Ser Lys Tyr Leu Leu Ser Ala Thr Val
 145 150 155 160
 Cys Gln Ala Leu Phe
 165

<210> 4079

<211> 272

<212> PRT

<213> Homo sapiens

<400> 4079

Met Gln Ser Asn Met Thr Asn Thr Val Val Arg Thr Thr Leu Arg Asn
 1 5 10 15
 Asp Leu Ser Gln Glu Gly Ile Ile His His Leu Lys Ile Leu Ser Pro
 20 25 30
 Ile Tyr Cys Ala Phe Gln Asn Asp Leu Leu Thr Ser Ser Gly Phe Thr
 35 40 45
 Leu Glu Trp Gly Val Tyr Thr Ile Ile Glu Asp Leu His Gly Ala Gly
 50 55 60
 Asn Phe Val Thr Glu Met Gln Leu Phe Ile Gly Asp Ser Pro Ile Pro
 65 70 75 80
 Gln Asn Tyr Ser Val Ser Ala Ser Asp Asp Val Arg Ile Glu Val Gly
 85 90 95
 Leu Tyr Arg Gln Lys Ser Asn Leu Lys Val Val Leu Thr Glu Cys Trp
 100 105 110
 Ala Thr Pro Ser Ser Asn Ala Arg Asp Pro Ile Thr Phe Ser Phe Ile
 115 120 125
 Asn Asn Ser Cys Pro Val Pro Asn Thr Tyr Thr Asn Val Ile Glu Asn
 130 135 140
 Gly Asn Ser Asn Lys Ala Gln Phe Lys Leu Arg Ile Phe Ser Phe Ile
 145 150 155 160
 Asn Asn Ser Ile Val Tyr Leu His Cys Lys Leu Arg Val Cys Met Glu
 165 170 175
 Ser Pro Gly Ala Thr Cys Lys Ile Asn Cys Asn Asn Phe Arg Leu Leu
 180 185 190

Gln Asn Ser Glu Thr Ser Ala Thr His Gln Met Ser Trp Gly Pro Leu
 195 200 205
 Ile Arg Ser Glu Gly Glu Pro Pro His Ala Glu Ala Gly Leu Gly Ala
 210 215 220
 Gly Tyr Val Val Leu Ile Val Val Ala Ile Phe Val Leu Val Ala Gly
 225 230 235 240
 Thr Ala Thr Leu Leu Ile Val Arg Tyr Gln Arg Met Asn Gly Arg Tyr
 245 250 255
 Asn Phe Lys Ile Gln Ser Asn Asn Phe Ser Tyr Gln Val Phe Tyr Glu
 260 265 270

<210> 4080

<211> 133

<212> PRT

<213> Homo sapiens

<400> 4080

Met Ala Gly Ala Gly Val Gly Gly Trp Val Pro Gly Ala Trp Leu Gln
 1 5 10 15
 Gly Cys Pro Ser Val Leu Arg Pro Leu Val Ser Leu Pro Ser Ser Ser
 20 25 30
 Pro Thr Leu Glu Phe Leu Leu Phe Leu Ile Leu Val Met Phe Leu Gly
 35 40 45
 Phe Ile Val Leu Leu Leu Arg Glu Val Lys Leu His His Gln Asp Trp
 50 55 60
 Ile Ala Phe Ala Phe Gln Leu Phe Ile His Pro Leu Ala Trp Thr Arg
 65 70 75 80
 Thr Arg Ala Gly Ile Phe Gly Cys Phe Arg Phe Ala Arg Cys Ser Ile
 85 90 95
 Phe Ala Gln Val Leu Arg Leu Glu Met His Phe Lys Leu Ser Arg Leu
 100 105 110
 Ala Gly Lys Met Gln Asp Ala Leu Trp Leu His Lys Cys Cys Thr Ser
 115 120 125
 Gly Val Gly Ala Gly
 130

<210> 4081

<211> 566

<212> PRT

<213> Homo sapiens

<400> 4081

```

Met Val Arg Glu Lys Tyr Ile Arg Pro Leu Thr Thr Glu Glu Trp Val
  1             5             10             15
Glu Lys Met Met Asp Ala Asp Pro Glu Phe Pro Pro Asp Phe Ala Glu
          20             25             30
Ala Phe Glu Ser Gln Leu Ser Leu Ser Asp Ser Pro Ser Leu Cys Arg
          35             40             45
Pro Val Tyr Ser Lys Lys Gly Leu Glu His Lys Ala Asp Leu Gln Gln
          50             55             60
His Leu Phe Pro Val Pro Pro Gly His Leu Glu Cys Thr Pro Glu Ser
          65             70             75             80
Leu Trp Lys Glu Leu Ser Leu Gln His Glu Gly Leu Lys Glu Leu Ile
          85             90             95
His Lys Gln Met Arg Pro Phe Ser Gln Gly Ile Val Ile Leu Ser Arg
          100            105            110
Ser Trp Ala Val Asp Leu Asn Leu Gln Glu Lys Pro Gly Val Ile Cys
          115            120            125
Asp Ala Leu Leu Ile Ala Gln Asn Ser Thr Pro Ile Leu Tyr Thr Ile
          130            135            140
Leu Arg Glu Gln Asp Ala Glu Gly Gln Asp Tyr Cys Thr Arg Thr Ala
          145            150            155            160
Phe Thr Leu Lys Gln Lys Leu Val Asn Met Gly Gly Tyr Thr Gly Lys
          165            170            175
Val Cys Val Arg Ala Lys Val Leu Cys Leu Ser Pro Glu Ser Ser Thr
          180            185            190
Glu Ala Leu Glu Ala Ala Val Ser Pro Met Asp Tyr Pro Ala Ser Tyr
          195            200            205
Ser Leu Ala Gly Thr Gln His Met Glu Ala Leu Leu Gln Ser Leu Val
          210            215            220

```

Ile Val Leu Leu Gly Phe Arg Ser Leu Leu Ser Asp Gln Leu Gly Cys
 225 230 235 240
 Glu Val Leu Asn Leu Leu Thr Ala Gln Gln Tyr Glu Ile Phe Ser Arg
 245 250 255
 Ser Leu Arg Lys Asn Arg Glu Leu Phe Val His Gly Leu Pro Gly Ser
 260 265 270
 Gly Lys Thr Ile Met Ala Met Lys Ile Met Glu Lys Ile Arg Asn Val
 275 280 285
 Phe His Cys Glu Ala His Arg Ile Leu Tyr Val Cys Glu Asn Gln Pro
 290 295 300
 Leu Arg Asn Phe Ile Ser Val Arg Asn Ile Cys Arg Ala Glu Thr Arg
 305 310 315 320
 Lys Thr Phe Leu Arg Glu Lys Phe Glu His Ile Gln His Ile Val Ile
 325 330 335
 Asp Glu Ala Gln Asn Phe Arg Thr Glu Asp Gly Asp Trp Tyr Arg Lys
 340 345 350
 Ala Lys Thr Ile Thr Gln Arg Glu Lys Asp Cys Pro Gly Val Leu Trp
 355 360 365
 Ile Phe Leu Asp Tyr Phe Gln Thr Ser His Leu Gly His Ser Gly Leu
 370 375 380
 Pro Pro Leu Ser Ala Gln Tyr Pro Arg Glu Glu Leu Thr Arg Val Val
 385 390 395 400
 Arg Asn Ala Asp Glu Ile Ala Glu Tyr Ile Gln Gln Glu Met Gln Leu
 405 410 415
 Ile Ile Glu Asn Pro Pro Ile Asn Ile Pro His Gly Tyr Leu Ala Ile
 420 425 430
 Leu Ser Glu Ala Lys Trp Val Pro Gly Val Pro Gly Asn Thr Lys Ile
 435 440 445
 Ile Lys Asn Phe Thr Leu Glu Gln Ile Val Thr Tyr Val Ala Asp Thr
 450 455 460
 Cys Arg Cys Phe Phe Glu Arg Gly Tyr Ser Pro Lys Asp Val Ala Val
 465 470 475 480
 Leu Val Ser Thr Val Thr Glu Val Glu Gln Tyr Gln Ser Lys Leu Leu
 485 490 495
 Lys Ala Met Arg Lys Lys Met Val Val Gln Leu Ser Asp Ala Cys Asp
 500 505 510

Met Leu Gly Val His Ile Val Leu Asp Ser Val Arg Arg Phe Ser Gly
 515 520 525
 Leu Glu Arg Ser Ile Val Phe Gly Ile His Pro Arg Thr Ala Asp Pro
 530 535 540
 Ala Ile Leu Pro Asn Ile Leu Ile Cys Leu Ala Ser Arg Ala Lys Gln
 545 550 555 560
 His Leu Tyr Ile Phe Leu
 565

<210> 4082

<211> 208

<212> PRT

<213> Homo sapiens

<400> 4082

Met Leu Met Leu Phe Val Phe Gly Val Leu Leu His Glu Val Ser Leu
 1 5 10 15
 Ser Gly Gln Asn Glu Ala Pro Pro Asn Thr His Ser Ile Pro Gly Glu
 20 25 30
 Pro Leu Tyr Asn Tyr Ala Ser Ile Arg Leu Pro Glu Glu His Ile Pro
 35 40 45
 Phe Phe Leu His Asn Asn Arg His Ile Ala Thr Val Cys Arg Lys Asp
 50 55 60
 Ser Leu Cys Pro Tyr Lys Lys His Leu Glu Lys Leu Lys Tyr Cys Trp
 65 70 75 80
 Gly Tyr Glu Lys Ser Cys Lys Pro Glu Phe Arg Phe Gly Tyr Pro Val
 85 90 95
 Cys Ser Tyr Val Asp Met Gly Trp Thr Asp Thr Leu Glu Ser Ala Glu
 100 105 110
 Asp Ile Phe Trp Lys Gln Ala Asp Phe Gly Tyr Ala Arg Glu Arg Leu
 115 120 125
 Glu Glu Met His Val Leu Cys Gln Pro Lys Glu Thr Ser Asp Ser Ser
 130 135 140
 Leu Val Cys Ser Arg Tyr Leu Gln Tyr Cys Arg Ala Thr Asn Leu Tyr
 145 150 155 160

Leu Asp Leu Arg Asn Ile Lys Arg Asn His Asp Arg Phe Lys Glu Asp
 165 170 175
 Phe Phe Gln Ser Gly Glu Ile Gly Gly His Cys Lys Leu Asp Ile Arg
 180 185 190
 Thr Leu Thr Ser Glu Gly Arg Arg Lys Ser Pro Leu Gln Ser Trp Cys
 195 200 205

<210> 4083

<211> 184

<212> PRT

<213> Homo sapiens

<400> 4083

Met Cys Arg Arg Val Leu Ser Gln Ala Val Trp Gly Ser Tyr Gly Pro
 1 5 10 15
 Ser Pro Glu Pro Tyr Pro Thr Trp Ser Leu Gly Asp Gly Gln Gln Val
 20 25 30
 Pro Gly His Cys Gly Val Cys Gln Leu Leu Gly Ser Phe Pro Gly Met
 35 40 45
 Pro Leu Gly Ala Trp Glu Arg Trp Ser Gly Trp Ala Val Phe Pro Ala
 50 55 60
 Ala Gly Ser Gly Leu Gly Glu Ala Ala Trp Val Gly Leu Pro Ser Asp
 65 70 75 80
 Pro Gly Leu Ser Arg Cys Arg Phe Gly Ile Gly Arg Gly Gly Met Gly
 85 90 95
 Gly Pro Pro Ser Arg His Arg Ile Phe Pro Ala Ala Ser Ser Gly Pro
 100 105 110
 Gly Glu Ala Ala Trp Val Gly Leu Pro Pro Asp Thr Gly Ser Phe Leu
 115 120 125
 Leu Gln Val Trp Asp Gln Glu Arg Arg His Gly Trp Ala Ser Leu Leu
 130 135 140
 Thr Gln Val Ser Pro Ala Ala Gly Ser Gly Leu Gly Glu Ala Met Trp
 145 150 155 160
 Val Gly Leu Thr Gln Gly Leu Ser Gly Cys Arg Phe Arg Thr Gly Arg
 165 170 175

Gly Gly Val Gly Gly Pro Pro Ser

180

<210> 4084

<211> 110

<212> PRT

<213> Homo sapiens

<400> 4084

Met Tyr Val Cys Leu Tyr Glu Thr Phe Ser Ser Leu Phe Ser Leu Leu

1 5 10 15

Arg Glu Lys Ile Ser Leu Asn Cys Phe Ser Phe Ser Phe Leu Val Glu

20 25 30

Tyr His Leu His Pro Leu Phe Leu Ile Ala Ser Leu Pro Met Phe Phe

35 40 45

Pro Gln Lys Ser Leu Phe Asp Ile Ile Ser Lys Ile Asp Leu Met Val

50 55 60

Asn Ser Gly Lys Leu Gly Thr Thr Val Lys Pro Lys Ser Leu Val Thr

65 70 75 80

Ser Ser Ser Gly Ala Leu Lys Lys Gln His Lys Lys Pro Phe Asp Ala

85 90 95

Met Asn Asn Ile Val Ala Asn Leu Leu Leu Asn Leu Thr Arg

100 105 110

<210> 4085

<211> 329

<212> PRT

<213> Homo sapiens

<400> 4085

Met Leu Pro Leu Glu Pro Tyr Leu Thr Gln Thr Ser Ala Val Pro Gln

1 5 10 15

Met Ser His Phe Met Cys His Ser Pro Thr His Lys Pro Gln Gly Leu

	20		25		30										
Leu	Pro	Trp	Ala	Pro	Phe	His	Gln	Ala	Ser	Val	Ser	Leu	Tyr	Pro	Ile
	35		40		45										
Ser	Pro	Trp	Pro	Ser	Glu	Ser	Val	Cys	Pro	Pro	Thr	Cys	Pro	Gly	Gly
	50		55		60										
Ala	Ser	Cys	Trp	Phe	Pro	Ala	Gly	Asn	Ala	Trp	Asp	Arg	Val	Glu	Leu
65			70		75									80	
Gly	Phe	Leu	Gly	Phe	Gly	Ala	Gly	Gly	Val	Ser	Ile	Ala	Val	Pro	Gly
	85		90		95										
Phe	Pro	Leu	Ser	Cys	Gly	Gln	Gly	Cys	Cys	Ala	Gly	Gly	Trp	Leu	Gly
	100		105		110										
His	Gly	Ala	Arg	Phe	Pro	Ala	Lys	Leu	Arg	Ala	Phe	Pro	Gln	Val	Ile
	115		120		125										
Arg	Arg	Gly	Trp	Leu	Thr	Ile	Asn	Asn	Ile	Ser	Leu	Met	Lys	Gly	Gly
	130		135		140										
Ser	Lys	Glu	Tyr	Trp	Phe	Val	Leu	Thr	Ala	Glu	Ser	Leu	Ser	Trp	Tyr
145			150		155									160	
Lys	Asp	Glu	Glu	Glu	Lys	Glu	Lys	Lys	Tyr	Met	Leu	Pro	Leu	Asp	Asn
	165		170		175										
Leu	Lys	Ile	Arg	Asp	Val	Glu	Lys	Gly	Phe	Met	Ser	Asn	Lys	His	Val
	180		185		190										
Phe	Ala	Ile	Phe	Asn	Thr	Glu	Gln	Arg	Asn	Val	Tyr	Lys	Asp	Leu	Arg
	195		200		205										
Gln	Ile	Glu	Leu	Ala	Cys	Asp	Ser	Gln	Glu	Asp	Val	Asp	Ser	Trp	Lys
	210		215		220										
Ala	Ser	Phe	Leu	Arg	Ala	Gly	Val	Tyr	Pro	Glu	Lys	Asp	Gln	Val	Arg
225			230		235									240	
Ser	Arg	Pro	Ala	Gln	Pro	Gly	Pro	Glu	Pro	Pro	Pro	Gly	Arg	Gly	Ser
	245		250		255										
Arg	Ala	Gly	Phe	Pro	Gln	Asp	Arg	Ser	Phe	Ser	Gly	His	Val	Ser	Arg
	260		265		270										
Glu	Ser	Leu	Lys	Ser	Cys	Ser	Arg	Cys	Pro	Leu	Glu	Gln	Ala	Lys	Glu
	275		280		285										
Lys	Leu	Gly	Val	Leu	Cys	His	Gln	Gly	Pro	Glu	Ser	Ser	Leu	Thr	Glu
	290		295		300										
Ala	Ser	Asp	Arg	Gly	Thr	Gln	Gly	Met	Gly	Ser	His	Leu	Leu	Cys	Ser

305 310 315 320
Pro Leu Phe Ser Pro Ser Ile Leu Arg
 325

<210> 4086
<211> 550
<212> PRT
<213> Homo sapiens

<400> 4086																
Met	Tyr	Ser	Thr	Asp	Glu	Asn	Leu	Ile	Leu	Ser	Pro	Leu	Leu	Gly	Asn	
1				5					10					15		
Val	Cys	Phe	Ser	Ser	Ser	Gln	Tyr	Ser	Ile	Cys	Phe	Thr	Leu	Gly	Ser	
			20					25					30			
Phe	Ala	Lys	Ile	Tyr	Ala	Asp	Thr	Phe	Gly	Asp	Ile	Asn	Tyr	Gln	Glu	
		35					40					45				
Phe	Ala	Lys	Arg	Leu	Trp	Gly	Asp	Ile	Tyr	Phe	Asn	Pro	Lys	Thr	Arg	
	50					55					60					
Lys	Phe	Thr	Lys	Lys	Ala	Pro	Thr	Ser	Ser	Ser	Gln	Arg	Ser	Phe	Val	
65				70					75						80	
Glu	Phe	Ile	Leu	Glu	Pro	Leu	Tyr	Lys	Ile	Leu	Ala	Gln	Val	Val	Gly	
			85						90					95		
Asp	Val	Asp	Thr	Ser	Leu	Pro	Arg	Thr	Leu	Asp	Glu	Leu	Gly	Ile	His	
		100						105					110			
Leu	Thr	Lys	Glu	Glu	Leu	Lys	Leu	Asn	Ile	Arg	Pro	Leu	Leu	Arg	Leu	
	115						120					125				
Val	Cys	Lys	Lys	Phe	Phe	Gly	Glu	Phe	Thr	Gly	Phe	Val	Asp	Met	Cys	
	130					135					140					
Val	Gln	His	Ile	Pro	Ser	Pro	Lys	Val	Gly	Ala	Lys	Pro	Lys	Ile	Glu	
145				150					155					160		
His	Thr	Tyr	Thr	Gly	Gly	Val	Asp	Ser	Asp	Leu	Gly	Glu	Ala	Met	Ser	
			165					170					175			
Asp	Cys	Asp	Pro	Asp	Gly	Pro	Leu	Met	Cys	His	Thr	Thr	Lys	Met	Tyr	
		180					185					190				
Ser	Thr	Asp	Asp	Gly	Val	Gln	Phe	His	Ala	Phe	Gly	Arg	Val	Leu	Ser	

195	200	205
Gly Thr Ile His Ala Gly Gln Pro Val Lys Val Leu Gly Glu Asn Tyr		
210	215	220
Thr Leu Glu Asp Glu Glu Asp Ser Gln Ile Cys Thr Val Gly Arg Leu		
225	230	235
Trp Ile Ser Val Ala Arg Tyr His Ile Glu Val Asn Arg Val Pro Ala		
245	250	255
Gly Asn Trp Val Leu Ile Glu Gly Val Asp Gln Pro Ile Val Lys Thr		
260	265	270
Ala Thr Ile Thr Glu Pro Arg Gly Asn Glu Glu Ala Gln Ile Phe Arg		
275	280	285
Pro Leu Lys Phe Asn Thr Thr Ser Val Ile Lys Ile Ala Val Glu Pro		
290	295	300
Val Asn Pro Ser Glu Leu Pro Lys Met Leu Asp Gly Leu Arg Lys Val		
305	310	315
Asn Lys Ser Tyr Pro Ser Leu Thr Thr Lys Val Glu Glu Ser Gly Glu		
325	330	335
His Val Ile Leu Gly Thr Gly Glu Leu Tyr Leu Asp Cys Val Met His		
340	345	350
Asp Leu Arg Lys Met Tyr Ser Glu Ile Asp Ile Lys Val Ala Asp Pro		
355	360	365
Val Val Thr Phe Cys Glu Thr Val Val Glu Thr Ser Ser Leu Lys Cys		
370	375	380
Phe Ala Glu Thr Pro Asn Lys Lys Asn Lys Ile Thr Met Ile Ala Glu		
385	390	395
Pro Leu Glu Lys Gly Leu Ala Glu Asp Ile Glu Asn Glu Val Val Gln		
405	410	415
Ile Thr Trp Asn Arg Lys Lys Leu Gly Glu Phe Phe Gln Thr Lys Tyr		
420	425	430
Asp Trp Asp Leu Leu Ala Ala Arg Ser Ile Trp Ala Phe Gly Pro Asp		
435	440	445
Ala Thr Gly Pro Asn Ile Leu Val Asp Asp Thr Leu Pro Ser Glu Val		
450	455	460
Asp Lys Ala Leu Leu Gly Ser Val Lys Asp Ser Ile Val Gln Gly Phe		
465	470	475
Gln Trp Gly Thr Arg Glu Gly Pro Leu Cys Asp Glu Cys Lys Ser Thr		

485 490 495
 Ser Thr Pro Pro Pro Gln Ser Ser Arg Val Leu Ala Ala Arg His Met
 500 505 510
 Ser Gly Met Gly Ser Pro Ser Leu Gly Phe Gly Arg Arg Ser Ser Leu
 515 520 525
 Gly Tyr Thr Gly Pro Ser Gln Val Leu Gly Gln Leu Leu Pro Phe Ser
 530 535 540
 Phe Leu Ile Leu Val Val
 545 550

<210> 4087

<211> 104

<212> PRT

<213> Homo sapiens

<400> 4087

Met Pro Arg Gly Val Gln Ile Lys Lys Arg Ala Cys Ala Gln Met Trp
 1 5 10 15
 Ala Gln Val Ser Gln Arg Gly Lys Ser Ser Phe Trp Pro Ser Leu Gln
 20 25 30
 His Ala Leu Gly Pro Ser Asn Ile Phe Lys Ile Arg Lys Glu Leu Phe
 35 40 45
 Ser Ser His Gln Tyr Leu Leu Cys Phe Gln Thr Ile Phe Phe Ala Asn
 50 55 60
 Leu Pro Cys Gln Cys Ser Val Pro Pro Cys Pro His Thr Ser Ser Ala
 65 70 75 80
 Gly Arg Ala Ala Leu Glu Thr Val Leu Ser Ile Pro Cys Gly Glu Arg
 85 90 95
 Gly Thr Ala Ala Pro Ala Thr Arg
 100

<210> 4088

<211> 109

<212> PRT

<213> Homo sapiens

<400> 4088

```

Met Ala Leu Cys Asp Cys Gly Ser Pro Ser Ser Asn Gly Pro Ser Leu
 1             5             10             15
Ser Tyr Phe Gln Tyr Ser Leu Pro Thr Pro Lys Gly Gly Lys Tyr Ala
      20             25             30
Ile Asn Pro His Leu Thr Glu Asp Gln Arg Phe Pro Gln Leu Arg Leu
      35             40             45
Ser Gln Lys Ala Arg Gln Lys Thr Asn Val Phe Ala Pro Asp Phe Ile
      50             55             60
Ala Gly Val Ser Pro Phe Val Glu Asn Asp Ile Ser Ser Arg Ser Ala
      65             70             75             80
Thr Leu Gln Val Arg Asp Ser Thr Leu Gly Ala Gly Arg Arg Arg Leu
      85             90             95
Asn Pro Asn Ala Ser Arg Lys Lys Phe Val Lys Lys Arg
      100            105

```

<210> 4089

<211> 127

<212> PRT

<213> Homo sapiens

<400> 4089

```

Met Asn Cys Thr Ala Pro Pro Gly Arg Gly Met Trp His Ala Ala Trp
 1             5             10             15
Gln Leu Ser Leu Gly Leu Gly Ser Ala Gly Ile Ala Gly Val Val Ala
      20             25             30
Leu Pro Ala Ala Pro Gly Arg Pro Arg Pro Gly Gln Asp Pro Arg Gly
      35             40             45
Gln Pro Asp Met Pro Arg Leu Gln Cys Leu Pro Arg Ser Leu Leu Ser
      50             55             60
Ser Ser Gly Gln Gly Gly Arg Gly Leu Ser Gln Gly His Ser Gln Ala
      65             70             75             80
Glu Cys Arg Asn Ser Leu Leu Lys Gly Ser Cys Ala Ser Val Pro Phe

```

	85		90		95										
Pro	Trp	Leu	His	Thr	Gln	Phe	Leu	Cys	Ala	Leu	Ser	Phe	Phe	Phe	Phe
	100						105					110			
Phe	Pro	Gln	Thr	Trp	Ser	Arg	Ser	Val	Thr	Gln	Ala	Arg	Val	Gln	
	115						120					125			

<210> 4090

<211> 176

<212> PRT

<213> Homo sapiens

<400> 4090

Met	Arg	Gly	Pro	His	Ser	Ser	Gln	Trp	Gly	Ser	Ile	Asp	Asp	Gly	Pro
1				5					10					15	
Val	Ile	Ser	Gly	Phe	Pro	Leu	Lys	Gly	Ala	Leu	Phe	Gly	Thr	Phe	Phe
			20					25					30		
Tyr	Ser	Ile	Ser	Leu	Phe	Ala	Trp	Ser	His	Ile	Leu	Leu	Leu	Phe	Pro
			35				40						45		
Ala	Lys	Glu	Ser	Met	Trp	Glu	Phe	Ile	Tyr	Leu	Phe	Ile	Glu	Thr	Glu
	50					55						60			
Ser	His	Ser	Val	Thr	Gln	Ala	Gly	Val	Gln	Trp	Cys	Asn	Leu	Ser	Ser
	65				70				75					80	
Leu	Gln	Pro	Pro	Pro	Pro	Trp	Phe	Lys	Gln	Phe	Ser	Cys	Leu	Ser	Phe
				85					90					95	
Pro	Ser	Ser	Trp	Asn	Tyr	Arg	His	Leu	Pro	Pro	Cys	Pro	Ala	Asn	Phe
			100					105					110		
Leu	Tyr	Phe	Leu	Tyr	Phe	Phe	Phe	Phe	Leu	Arg	Trp	Ser	Leu	Ser	Val
			115					120					125		
Leu	Pro	Lys	Leu	Glu	Tyr	Ser	Gly	Val	Ile	Ser	Ala	His	Cys	Asn	Phe
	130						135					140			
Cys	Leu	Pro	Gly	Ser	Ser	Asn	Ser	Ser	Cys	Leu	Ser	Leu	Pro	Ser	Arg
	145					150				155				160	
Trp	Asn	Tyr	Arg	Cys	Pro	Leu	Pro	Cys	Leu	Ala	Asn	Phe	Cys	Ile	Phe
				165					170					175	

<210> 4091

<211> 144

<212> PRT

<213> Homo sapiens

<400> 4091

```

Met Val Tyr Asn Asn Glu Val Val Gly Lys Gly Arg Asn Glu Val Asn
  1              5              10              15
Gln Thr Lys Asn Ala Thr Arg His Ala Glu Met Val Ala Ile Asp Gln
          20              25              30
Val Leu Asp Trp Cys Arg Gln Ser Gly Lys Ser Pro Ser Glu Val Phe
          35              40              45
Glu His Thr Val Leu Tyr Val Thr Val Glu Pro Cys Ile Met Cys Ala
          50              55              60
Ala Ala Leu Arg Leu Met Lys Ile Pro Leu Val Val Tyr Gly Cys Gln
          65              70              75              80
Asn Glu Arg Phe Gly Gly Cys Gly Ser Val Leu Asn Ile Ala Ser Ala
          85              90              95
Asp Leu Pro Asn Thr Gly Arg Pro Phe Gln Cys Ile Pro Gly Tyr Arg
          100             105             110
Ala Glu Glu Ala Val Glu Met Leu Lys Thr Phe Tyr Lys Gln Glu Asn
          115             120             125
Pro Asn Ala Pro Lys Ser Lys Val Arg Lys Lys Glu Cys Gln Lys Ser
          130             135             140

```

<210> 4092

<211> 176

<212> PRT

<213> Homo sapiens

<400> 4092

```

Met Glu Asn Gly Gln Ile Thr Pro Asp Gly Phe Leu Ser Lys Ser Ala
  1              5              10              15
Pro Ser Glu Leu Ile Asn Met Thr Gly Asp Leu Met Pro Pro Asn Gln

```

	20		25		30										
Val	Asp	Ser	Leu	Ser	Asp	Asp	Phe	Thr	Ser	Leu	Ser	Lys	Asp	Gly	Leu
	35		40		45										
Ile	Gln	Lys	Pro	Gly	Ser	Asn	Ala	Phe	Val	Gly	Gly	Ala	Lys	Asn	Cys
	50		55		60										
Ser	Leu	Ser	Val	Asp	Asp	Gln	Lys	Asp	Pro	Val	Ala	Ser	Thr	Leu	Gly
	65		70		75									80	
Ala	Met	Pro	Asn	Thr	Leu	Gln	Ile	Thr	Pro	Ala	Met	Ala	Gln	Gly	Ile
			85		90								95		
Asn	Ala	Asp	Ile	Lys	His	Gln	Leu	Met	Lys	Glu	Val	Arg	Lys	Phe	Gly
	100		105		110										
Arg	Lys	Tyr	Glu	Arg	Ile	Phe	Ile	Leu	Leu	Glu	Glu	Val	Gln	Gly	Pro
	115		120		125										
Leu	Glu	Met	Lys	Lys	Gln	Phe	Val	Glu	Phe	Thr	Ile	Lys	Glu	Ala	Ala
	130		135		140										
Arg	Phe	Lys	Arg	Arg	Val	Leu	Ile	Gln	Tyr	Leu	Glu	Lys	Arg	His	Tyr
	145		150		155									160	
Lys	Val	His	Leu	Arg	Leu	Pro	Pro	Thr	Ser	Asp	Ile	Cys	Ser	Cys	Met
			165		170									175	

<210> 4093

<211> 326

<212> PRT

<213> Homo sapiens

<400> 4093

Met	Glu	Gly	His	Val	Asp	Arg	Ser	Ser	Gln	Pro	Thr	Ala	Arg	Arg	Ile
1			5						10					15	
Ile	Asn	Ser	Asp	Pro	Val	Asp	Leu	Asp	Leu	Val	Glu	Glu	Asn	Thr	Phe
			20						25					30	
Val	Gly	Pro	Pro	Pro	Ala	Thr	Ser	Ile	Ser	Gly	Gly	Ser	Val	Tyr	Pro
			35						40					45	
Thr	Glu	Pro	Asn	Cys	Ser	Ser	Ala	Thr	Phe	Thr	Gly	Asn	Leu	Ser	Phe
			50						55					60	
Leu	Ala	Ser	Leu	Gln	Leu	Ser	Ser	Asp	Val	Ser	Ser	Leu	Ser	Pro	Thr

65		70		75		80
Ser Asn Asn Ser Arg Ser Ser Ser Ser Ser Ser Asn Gln Lys Ala Pro						
	85		90		95	
Leu Pro Cys Pro Gln Gln Asp Val Ser Arg Pro Pro Gln Ala Leu Pro						
	100		105		110	
Cys Pro Leu Arg Pro Leu Pro Cys Pro Pro Arg Ala Ser Pro Cys Pro						
	115		120		125	
Pro Arg Ala Ser Ser Cys Pro Pro Arg Ala Leu Ser Cys Pro Ser Gln						
	130		135		140	
Thr Met Gln Cys Gln Leu Pro Ala Leu Thr His Pro Pro Gln Glu Val						
145		150		155		160
Pro Cys Pro Arg Gln Asn Ile Pro Gly Pro Pro Gln Asp Ser Leu Gly						
	165		170		175	
Leu Pro Gln Asp Val Pro Gly Leu Pro Gln Ser Ile Leu His Pro Gln						
	180		185		190	
Asp Val Ala Tyr Leu Gln Asp Met Pro Arg Ser Pro Gly Asp Val Pro						
	195		200		205	
Gln Ser Pro Ser Asp Val Ser Pro Ser Pro Asp Ala Pro Gln Ser Pro						
	210		215		220	
Gly Gly Met Pro His Leu Pro Gly Asp Val Leu His Ser Pro Gly Asp						
225		230		235		240
Met Pro His Ser Ser Gly Gly Val Thr His Ser Pro Arg Asp Ile Pro						
	245		250		255	
His Leu Pro Gly Asp Arg Pro Asp Phe Thr Gln Asn Asp Val Gln Asn						
	260		265		270	
Arg Asp Met Pro Met Asp Ile Ser Ala Leu Ser Ser Pro Ser Cys Thr						
	275		280		285	
Pro Ala Trp Gly Thr Glu Gln Asp Ser Val Ser Lys Lys Lys Lys Lys						
	290		295		300	
Lys Lys Arg Lys Glu Ile Pro Pro Asn Phe Leu Leu Phe Asn Leu Tyr						
305		310		315		320
Arg Thr Arg Val Lys Asn						
	325					

<211> 106

<212> PRT

<213> Homo sapiens

<400> 4094

```

Met Gln His Gln Phe Ser Met Pro Thr Val Pro Pro Pro Glu Glu Leu
 1             5             10             15
Leu Asp Cys Glu Thr Leu Ile Asp Gln Tyr Leu Arg Asp Pro Asn Leu
      20             25             30
Gln Lys Arg Tyr Pro Leu Ala Leu Asn Arg Ile Ala Ala Gln Glu Val
      35             40             45
Pro Ile Glu Ile Lys Pro Val Asn Pro Ser Pro Leu Ser Gln Leu Gln
      50             55             60
Arg Met Glu Pro Lys Gln Met Phe Trp Val Arg Ala Arg Gly Tyr Ile
      65             70             75             80
Gly Lys Ser Thr Pro Trp Met Gly Gly Asn His Ser Pro Arg Gly Leu
      85             90             95
Pro Leu Ile Cys Cys Val Ala Leu Gly Thr
      100             105

```

<210> 4095

<211> 401

<212> PRT

<213> Homo sapiens

<400> 4095

```

Met Ser Leu Trp Lys Lys Thr Val Tyr Arg Ser Leu Cys Leu Ala Leu
 1             5             10             15
Ala Leu Leu Val Ala Val Thr Val Phe Gln Arg Ser Leu Thr Pro Gly
      20             25             30
Gln Phe Leu Gln Glu Pro Pro Pro Pro Thr Leu Glu Pro Gln Lys Ala
      35             40             45
Gln Lys Pro Asn Gly Gln Leu Val Asn Pro Asn Asn Phe Trp Lys Asn
      50             55             60
Pro Lys Asp Val Ala Ala Pro Thr Pro Met Ala Ser Gln Gly Pro Gln

```

65	70	75	80
Ala Trp Asp Val Thr Thr Thr Asn Cys Ser Ala Asn Ile Asn Leu Thr			
	85	90	95
His Gln Pro Trp Phe Gln Val Leu Glu Pro Gln Phe Arg Gln Phe Leu			
	100	105	110
Phe Tyr Arg His Cys Arg Tyr Phe Pro Met Leu Leu Asn His Pro Glu			
	115	120	125
Lys Cys Arg Gly Asp Val Tyr Leu Leu Val Val Val Lys Ser Val Ile			
	130	135	140
Thr Gln His Asp Arg Arg Glu Ala Ile Arg Gln Thr Trp Gly Arg Glu			
145	150	155	160
Arg Gln Ser Ala Gly Gly Gly Arg Gly Ala Val Arg Thr Leu Phe Leu			
	165	170	175
Leu Gly Thr Ala Ser Lys Gln Glu Glu Arg Thr His Tyr Gln Gln Leu			
	180	185	190
Leu Ala Tyr Glu Asp Arg Leu Tyr Gly Asp Ile Leu Gln Trp Gly Phe			
	195	200	205
Leu Asp Thr Phe Phe Asn Leu Thr Leu Lys Glu Ile His Phe Leu Lys			
	210	215	220
Trp Leu Asp Ile Tyr Cys Pro His Val Pro Phe Ile Phe Lys Gly Asp			
225	230	235	240
Asp Asp Val Phe Val Asn Pro Thr Asn Leu Leu Glu Phe Leu Ala Asp			
	245	250	255
Arg Gln Pro Gln Glu Asn Leu Phe Val Gly Asp Val Leu Gln His Ala			
	260	265	270
Arg Pro Ile Arg Arg Lys Asp Asn Lys Tyr Tyr Ile Pro Gly Ala Leu			
	275	280	285
Tyr Gly Lys Ala Ser Tyr Pro Pro Tyr Ala Gly Gly Gly Gly Phe Leu			
	290	295	300
Met Ala Gly Ser Leu Ala Arg Arg Leu His His Ala Cys Asp Thr Leu			
305	310	315	320
Glu Leu Tyr Pro Ile Asp Asp Val Phe Leu Gly Met Cys Leu Glu Val			
	325	330	335
Leu Gly Val Gln Pro Thr Ala His Glu Gly Phe Lys Thr Phe Gly Ile			
	340	345	350
Ser Arg Asn Arg Asn Ser Arg Met Asn Lys Glu Pro Cys Phe Phe Arg			

355 360 365
 Ala Met Leu Val Val His Lys Leu Leu Pro Pro Glu Leu Leu Ala Met
 370 375 380
 Trp Gly Leu Val His Ser Asn Leu Thr Cys Ser Arg Lys Leu Gln Val
 385 390 395 400
 Leu

<210> 4096

<211> 668

<212> PRT

<213> Homo sapiens

<400> 4096

Met Asn Ala Leu Gln Ser Leu Thr Gly Gly Pro Ala Ala Gly Ala Ala
 1 5 10 15
 Gly Ile Gly Met Pro Pro Arg Gly Pro Gly Gln Ser Leu Gly Gly Met
 20 25 30
 Gly Ser Leu Gly Ala Met Gly Gln Pro Met Ser Leu Ser Gly Gln Pro
 35 40 45
 Pro Pro Gly Thr Ser Gly Met Ala Pro His Ser Met Ala Val Val Ser
 50 55 60
 Thr Ala Thr Pro Gln Thr Gln Leu Gln Leu Gln Gln Val Ala Leu Gln
 65 70 75 80
 Gln Gln Gln Gln Gln Gln Gln Phe Gln Gln Gln Gln Gln Ala Ala Leu
 85 90 95
 Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Phe Gln Ala Gln Gln
 100 105 110
 Ser Ala Met Gln Gln Gln Phe Gln Ala Val Val Gln Gln Gln Gln Gln
 115 120 125
 Leu Gln Gln Gln Gln Gln Gln Gln Gln His Leu Ile Lys Leu His His
 130 135 140
 Gln Asn Gln Gln Gln Ile Gln Gln Gln Gln Gln Gln Leu Gln Arg Ile
 145 150 155 160
 Ala Gln Leu Gln Leu Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln

	165		170		175
Gln Gln Gln Gln Gln Gln Ala Leu Gln Ala Gln Pro Pro Ile Gln Gln					
	180		185		190
Pro Pro Met Gln Gln Pro Gln Pro Pro Pro Ser Gln Ala Leu Pro Gln					
	195		200		205
Gln Leu Gln Gln Met His His Thr Gln His His Gln Pro Pro Pro Gln					
	210		215		220
Pro Gln Gln Pro Pro Val Ala Gln Asn Gln Pro Ser Gln Leu Pro Pro					
225		230		235	240
Gln Ser Gln Thr Gln Pro Leu Val Ser Gln Ala Gln Ala Leu Pro Gly					
	245		250		255
Gln Met Leu Tyr Thr Gln Pro Pro Leu Lys Phe Val Arg Ala Pro Met					
	260		265		270
Val Val Gln Gln Pro Pro Val Gln Pro Gln Val Gln Gln Gln Gln Thr					
	275		280		285
Ala Val Gln Thr Ala Gln Ala Ala Gln Met Val Ala Pro Gly Val Gln					
	290		295		300
Val Ser Gln Ser Ser Leu Pro Met Leu Ser Ser Pro Ser Pro Gly Gln					
305		310		315	320
Gln Val Gln Thr Pro Gln Ser Met Pro Pro Pro Pro Gln Pro Ser Pro					
	325		330		335
Gln Pro Gly Gln Pro Ser Ser Gln Pro Asn Ser Asn Val Ser Ser Gly					
	340		345		350
Pro Ala Pro Ser Pro Ser Ser Phe Leu Pro Ser Pro Ser Pro Gln Pro					
	355		360		365
Ser Gln Ser Pro Val Thr Ala Arg Thr Pro Gln Asn Phe Ser Val Pro					
	370		375		380
Ser Pro Gly Pro Leu Asn Thr Pro Val Asn Pro Ser Ser Val Met Ser					
385		390		395	400
Pro Ala Gly Ser Ser Gln Ala Glu Glu Gln Gln Tyr Leu Asp Lys Leu					
	405		410		415
Lys Gln Leu Ser Lys Tyr Ile Glu Pro Leu Arg Arg Met Ile Asn Lys					
	420		425		430
Ile Asp Lys Asn Glu Asp Arg Lys Lys Asp Leu Ser Lys Met Lys Ser					
	435		440		445
Leu Leu Asp Ile Leu Thr Asp Pro Ser Lys Arg Cys Pro Leu Lys Thr					

450	455	460	
Leu Gln Lys Cys Glu Ile Ala Leu Glu Lys Leu Lys Asn Asp Met Ala			
465	470	475	480
Val Pro Thr Pro Pro Pro Pro Val Pro Pro Thr Lys Gln Gln Tyr			
	485	490	495
Leu Cys Gln Pro Leu Leu Asp Ala Val Leu Ala Asn Ile Arg Ser Pro			
	500	505	510
Val Phe Asn His Ser Leu Tyr Arg Thr Phe Val Pro Ala Met Thr Ala			
	515	520	525
Ile His Gly Pro Pro Ile Thr Ala Pro Val Val Cys Thr Arg Lys Arg			
	530	535	540
Arg Leu Glu Asp Asp Glu Arg Gln Ser Ile Pro Ser Val Leu Gln Gly			
545	550	555	560
Glu Val Ala Arg Leu Asp Pro Lys Phe Leu Val Asn Leu Asp Pro Ser			
	565	570	575
His Cys Ser Asn Asn Gly Thr Val His Leu Ile Cys Lys Leu Asp Asp			
	580	585	590
Lys Asp Leu Pro Ser Val Pro Pro Leu Glu Leu Ser Val Pro Ala Asp			
	595	600	605
Tyr Pro Ala Gln Ser Pro Leu Trp Ile Asp Arg Gln Trp Gln Tyr Asp			
	610	615	620
Ala Asn Pro Phe Leu Gln Ser Val His Arg Cys Met Thr Ser Arg Leu			
625	630	635	640
Leu Gln Leu Pro Asp Lys His Ser Val Thr Ala Leu Leu Asn Thr Trp			
	645	650	655
Ala Gln Ser Val His Gln Ala Cys Leu Ser Ala Ala			
	660	665	

<210> 4097

<211> 100

<212> PRT

<213> Homo sapiens

<400> 4097

Met Gln His Asn Ala Trp Leu Ile Phe Val Phe Ser Val Asp Thr Gly
 1 5 10 15
 Phe Cys His Val Val Gln Ala Gly Leu Lys Leu Leu Ser Ser Ser Asp
 20 25 30
 Pro Pro Thr Leu Ala Ser Gln Ser Ala Arg Ile Thr Gly Met Ser His
 35 40 45
 Gly Ala Trp Pro Ser Leu Ala Val Phe Tyr Lys Ala Lys His Ala Thr
 50 55 60
 Thr Ile Gln Pro Thr Asn Tyr Thr Leu Gly His Leu Ser Gln Arg Asn
 65 70 75 80
 Glu Asn Ile Leu Thr Lys Asn Pro His Met Asn Ala His Ser Ile Leu
 85 90 95
 Gly His Asn Ser
 100

<210> 4098

<211> 135

<212> PRT

<213> Homo sapiens

<400> 4098

Met Ser Ser Leu Glu Ile Ser Ser Ser Cys Phe Ser Leu Glu Thr Lys
 1 5 10 15
 Leu Pro Leu Ser Pro Pro Leu Val Glu Asp Ser Ala Phe Glu Pro Ser
 20 25 30
 Arg Lys Asp Met Asp Glu Val Glu Glu Lys Ser Lys Asp Val Ile Asn
 35 40 45
 Phe Thr Ala Glu Lys Leu Ser Val Asp Glu Val Ser Gln Leu Val Ile
 50 55 60
 Ser Pro Leu Cys Gly Ala Ile Ser Leu Phe Val Gly Thr Thr Arg Asn
 65 70 75 80
 Asn Phe Glu Gly Lys Lys Val Ile Ser Leu Glu Tyr Glu Ala Tyr Leu
 85 90 95
 Pro Met Ala Glu Asn Glu Val Arg Lys Ile Cys Ser Asp Ile Arg Gln
 100 105 110

Lys Trp Pro Val Lys His Ile Ala Val Phe His Arg Leu Gly Tyr Asp
 115 120 125

Phe Leu Tyr His Ser Lys Ser
 130 135

<210> 4099

<211> 488

<212> PRT

<213> Homo sapiens

<400> 4099

Met Gln His Val Ser Ser Ser Gln Ser Ser Gln Arg His Val Gln Trp
 1 5 10 15

Pro Gly Ala Cys Pro Gly Ala Gly Glu Glu Gln Pro Ala Cys Ser Gln
 20 25 30

Pro Ser Leu Pro Leu Thr Leu Pro Ser Pro Ser His Gln Leu Gln Gln
 35 40 45

Leu Met Val Arg Gly Gly Pro Ala Gly Gly Gln Asn Met Asn Val Asp
 50 55 60

Leu Gln Gly Val Gly Pro Gly Leu Gln Gly Ser Pro Gln Val Thr Leu
 65 70 75 80

Ala Pro Leu Pro Leu Pro Ser Pro Thr Ser Pro Gly Phe Gln Phe Ser
 85 90 95

Ala Gln Pro Arg Arg Phe Glu His Gly Ser Pro Ser Tyr Ile Gln Val
 100 105 110

Thr Ser Pro Leu Ser Gln Gln Val Gln Thr Gln Ser Pro Thr Gln Pro
 115 120 125

Ser Pro Gly Pro Gly Gln Ala Leu Gln Asn Val Arg Ala Gly Ala Pro
 130 135 140

Gly Pro Gly Leu Gly Leu Cys Ser Ser Ser Pro Thr Gly Asp Phe Val
 145 150 155 160

Asp Ala Ser Val Leu Val Arg Gln Ile Ser Leu Ser Pro Ser Ser Gly
 165 170 175

Gly His Leu Val Phe Gln Asp Gly Ser Gly Leu Thr Gln Ile Ala Gln
 180 185 190

Gly Ala Gln Val Gln Leu Gln His Pro Gly Thr Pro Ile Thr Val Arg
 195 200 205
 Glu Arg Arg Pro Ser Gln Pro His Thr Gln Ser Gly Gly Thr Ile His
 210 215 220
 His Leu Gly Pro Gln Ser Pro Ala Ala Ala Gly Gly Ala Gly Leu Gln
 225 230 235 240
 Pro Leu Ala Ser Pro Ser His Ile Thr Thr Ala Asn Leu Pro Pro Gln
 245 250 255
 Ile Ser Ser Ile Ile Gln Gly Gln Leu Val Gln Gln Gln Gln Val Leu
 260 265 270
 Gln Gly Pro Pro Leu Pro Arg Pro Leu Gly Phe Glu Arg Thr Pro Gly
 275 280 285
 Val Leu Leu Pro Gly Ala Gly Gly Ala Ala Gly Phe Gly Met Thr Ser
 290 295 300
 Pro Pro Pro Pro Thr Ser Pro Ser Arg Thr Ala Val Pro Pro Gly Leu
 305 310 315 320
 Ser Ser Leu Pro Leu Thr Ser Val Gly Asn Thr Gly Met Lys Lys Val
 325 330 335
 Pro Lys Lys Leu Glu Glu Ile Pro Pro Ala Ser Pro Glu Met Ala Gln
 340 345 350
 Met Arg Lys Gln Cys Leu Asp Tyr His His Gln Glu Met Gln Ala Leu
 355 360 365
 Lys Glu Val Phe Lys Glu Tyr Leu Ile Glu Leu Phe Phe Leu Gln His
 370 375 380
 Phe Gln Gly Asn Met Met Asp Phe Leu Ala Phe Lys Glu Arg Leu Tyr
 385 390 395 400
 Gly Pro Leu Gln Ala Tyr Leu Arg Gln Asn Asp Leu Asp Ile Glu Glu
 405 410 415
 Glu Glu Glu Glu His Phe Glu Val Ile Asn Asp Glu Val Lys Val Val
 420 425 430
 Ala Arg Lys His Gly Gln Pro Gly Thr Ser Val Ala Ile Ala Thr Gln
 435 440 445
 Leu Pro Pro Arg Thr Ser Ala Ala Phe Pro Ala Gln Gln Gln Pro Leu
 450 455 460
 Gln Gln Ile His Met Gly Thr Pro Val Pro Gly Asp Val Asn Ser Ile
 465 470 475 480

Lys Met Glu Ala Ser Lys Arg Gln

485

<210> 4100

<211> 262

<212> PRT

<213> Homo sapiens

<400> 4100

Met	Tyr	Ile	Leu	Val	Tyr	Thr	Tyr	Val	Tyr	Thr	Cys	Ile	Cys	Ile	Arg
1				5					10					15	
Val	Tyr	Val	His	Val	Tyr	Gly	Cys	Thr	Asp	Val	Tyr	Ser	Met	Tyr	Ile
				20				25						30	
Cys	Met	His	Val	Tyr	Met	Cys	Thr	Leu	Tyr	Thr	Val	Tyr	Met	Cys	Val
				35				40						45	
Tyr	Met	Cys	Thr	Cys	Ile	Pro	Val	Arg	Val	Tyr	Ile	His	Ile	Ile	Tyr
				50				55						60	
Thr	Tyr	Met	Tyr	Ile	His	Met	His	Ala	Tyr	Ala	Tyr	Met	Cys	Val	Phe
				65				70						75	
Ile	Cys	Thr	His	Met	His	Thr	Tyr	Val	Tyr	Ser	Tyr	Ala	Arg	Val	Cys
				85				90						95	
Ile	His	Met	Tyr	Ile	His	Ile	His	Ala	Tyr	Ala	Tyr	Ile	Cys	Ile	Phe
				100				105						110	
Ile	Tyr	Thr	His	Met	His	Thr	Tyr	Val	Tyr	Ser	Tyr	Ala	Arg	Ile	Cys
				115				120						125	
Ile	His	Met	Tyr	Ile	His	Ile	His	Ala	Tyr	Ala	Cys	Ile	Cys	Met	Phe
				130				135						140	
Met	Tyr	Ala	His	Met	Arg	Ala	Tyr	Val	Tyr	Ser	Tyr	Thr	Arg	Ile	Cys
				145				150						155	
Ile	His	Ile	Cys	Ile	Phe	Ile	Tyr	Thr	Tyr	Val	Cys	Met	Cys	Val	Cys
				165				170						175	
Ser	Cys	Ile	His	Val	Tyr	Thr	Cys	Val	Tyr	Ile	His	Ile	Tyr	Ile	Gly
				180				185						190	
Met	His	Ile	Cys	Val	Tyr	Ser	Tyr	Met	His	Arg	Tyr	Thr	Tyr	Val	Tyr
				195				200						205	

Ile His Ile Tyr Ile Cys Ile His Met Tyr Thr His Ile His Ile His
 210 215 220
 Thr His Asn Phe Ser Leu Thr Ile Cys Leu Leu Met Asn Thr Val Cys
 225 230 235 240
 Phe Ser Ile Leu Ala Thr Gly Asn Asn Ala Ser Met Asn Met Ala Val
 245 250 255
 Gln Ile Tyr Leu Arg Tyr
 260

<210> 4101

<211> 527

<212> PRT

<213> Homo sapiens

<400> 4101

Met Trp Pro Phe Ile Cys Gln Phe Ile Glu Lys Leu Phe Arg Glu Thr
 1 5 10 15
 Ile Glu Pro Ala Val Arg Gly Ala Asn Thr His Leu Ser Thr Phe Ser
 20 25 30
 Phe Thr Lys Val Asp Val Gly Gln Gln Pro Leu Arg Ile Asn Gly Val
 35 40 45
 Lys Val Tyr Thr Glu Asn Val Asp Lys Arg Gln Ile Ile Leu Asp Leu
 50 55 60
 Gln Ile Ser Phe Val Gly Asn Cys Glu Ile Asp Leu Glu Ile Lys Arg
 65 70 75 80
 Tyr Phe Cys Arg Ala Gly Val Lys Ser Ile Gln Ile His Gly Thr Met
 85 90 95
 Arg Val Ile Leu Glu Pro Leu Ile Gly Asp Met Pro Leu Val Gly Ala
 100 105 110
 Leu Ser Ile Phe Phe Leu Arg Lys Pro Leu Leu Glu Ile Asn Trp Thr
 115 120 125
 Gly Leu Thr Asn Leu Leu Asp Val Pro Gly Leu Asn Gly Leu Ser Asp
 130 135 140
 Thr Ile Ile Leu Asp Ile Ile Ser Asn Tyr Leu Val Leu Pro Asn Arg
 145 150 155 160

Ile Thr Val Pro Leu Val Ser Glu Val Gln Ile Ala Gln Leu Arg Phe
 165 170 175
 Pro Val Pro Lys Gly Val Leu Arg Ile His Phe Ile Glu Ala Gln Asp
 180 185 190
 Leu Gln Gly Lys Asp Thr Tyr Leu Lys Gly Leu Val Lys Gly Lys Ser
 195 200 205
 Asp Pro Tyr Gly Ile Ile Arg Val Gly Asn Gln Ile Phe Gln Ser Arg
 210 215 220
 Val Ile Lys Glu Asn Leu Ser Pro Lys Trp Asn Glu Val Tyr Glu Ala
 225 230 235 240
 Leu Val Tyr Glu His Pro Gly Gln Glu Leu Glu Ile Glu Leu Phe Asp
 245 250 255
 Glu Asp Pro Asp Lys Asp Asp Phe Leu Gly Ser Leu Met Ile Asp Leu
 260 265 270
 Ile Glu Val Glu Lys Glu Arg Leu Leu Asp Glu Trp Phe Thr Leu Asp
 275 280 285
 Glu Val Pro Lys Gly Lys Leu His Leu Arg Leu Glu Trp Leu Thr Leu
 290 295 300
 Met Pro Asn Ala Ser Asn Leu Asp Lys Val Leu Thr Asp Ile Lys Ala
 305 310 315 320
 Asp Lys Asp Gln Ala Asn Asp Gly Leu Ser Ser Ala Leu Leu Ile Leu
 325 330 335
 Tyr Leu Asp Ser Ala Arg Asn Leu Pro Ser Gly Lys Lys Ile Ser Ser
 340 345 350
 Asn Pro Asn Pro Val Val Gln Met Ser Val Gly His Lys Ala Gln Glu
 355 360 365
 Ser Lys Ile Arg Tyr Lys Thr Asn Glu Pro Val Trp Glu Glu Asn Phe
 370 375 380
 Thr Phe Phe Ile His Asn Pro Lys Arg Gln Asp Leu Glu Val Glu Val
 385 390 395 400
 Arg Asp Glu Gln His Gln Cys Ser Leu Gly Ser Leu Lys Val Pro Leu
 405 410 415
 Ser Gln Leu Leu Thr Ser Glu Asp Met Thr Val Ser Gln Arg Phe Gln
 420 425 430
 Leu Ser Asn Ser Gly Pro Asn Ser Thr Ile Lys Met Lys Ile Ala Leu
 435 440 445

Arg Val Leu His Leu Glu Lys Arg Glu Arg Pro Pro Asp His Gln His
 450 455 460
 Ser Ala Gln Val Lys Arg Pro Ser Val Ser Lys Glu Gly Arg Lys Thr
 465 470 475 480
 Ser Ile Lys Ser His Met Ser Gly Ser Pro Gly Pro Gly Gly Ser Asn
 485 490 495
 Thr Ala Pro Ser Thr Ser Gln Ser Arg Ser Arg Pro Pro Ala Ser Pro
 500 505 510
 Arg Thr Ser Arg Cys Pro Ser Pro Pro Arg Ser Cys Gly Lys Gly
 515 520 525

<210> 4102

<211> 135

<212> PRT

<213> Homo sapiens

<400> 4102

Met Gly Pro Cys Asn Gln Ala Gln Leu Cys Leu Val Phe Val Gln Thr
 1 5 10 15
 Ser Asn Gly Pro Gly Arg Gly Trp His Phe Gly Tyr Phe Cys Leu Arg
 20 25 30
 Gly Phe Leu Tyr Pro Asp Gln Ser Gln Pro His Ser Gln Trp Val Met
 35 40 45
 Arg Val Glu Ile Ala Ser Ser Tyr Pro Cys Phe Leu Gln Cys Leu Phe
 50 55 60
 Pro His Pro Asn Arg His Thr His Ala His Thr His Thr His Thr His
 65 70 75 80
 Thr His Thr His Thr Pro Ser Phe Pro Leu Leu Leu Ser Leu Gly Thr
 85 90 95
 Gly Ala Pro Pro Cys Ser Pro Cys Ser Thr Gln Pro Pro Gly Arg Ser
 100 105 110
 Pro Pro Thr Phe Asp Glu Ser Pro Pro Arg Lys Lys Tyr Asn Asn Leu
 115 120 125
 Glu Phe Gln Leu Asn Leu Gln
 130 135

<210> 4103

<211> 136

<212> PRT

<213> Homo sapiens

<400> 4103

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Met Arg Val Arg Met Cys Thr Tyr Cys Ser Leu Asp Phe Pro Ile Thr
  1              5              10              15
Lys Cys Leu Ser Gln Val Thr Leu Ser Ser Ser Ser Gln Phe Leu Arg
          20              25              30
Gln Ala Met Glu Thr Gly Ala Asp Ala Lys Trp Ser Arg Gly Arg Arg
          35              40              45
Ala Ala Cys Phe Ala Gly Pro Ala Pro Arg Leu Pro Ser Arg Ala Ala
          50              55              60
Leu Ser Leu Gly Thr Val Asn Ser His Arg Ser Cys Gln Pro Pro Val
          65              70              75              80
Leu Gly His Ala Pro His Met Asp Leu Glu Ser Val Ser Leu Leu Leu
          85              90              95
Met Ser Thr Ser Arg Ser Leu Ser Phe Ala Phe Met Cys Leu Tyr Ser
          100              105              110
Leu Tyr Ser Ser Ala Ile Gly Val Arg Ser Ser Phe Trp Thr Phe Leu
          115              120              125
Met Gln Ile Lys Glu Lys Gly Val
          130              135

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<210> 4104

<211> 122

<212> PRT

<213> Homo sapiens

<400> 4104

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Met Gly His Ala Gly Cys Gln Phe Lys Ala Leu Leu Trp Lys Asn Trp
  1              5              10              15

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Leu Cys Arg Leu Arg Asn Pro Val Leu Phe Leu Ala Glu Phe Phe Trp
 20 25 30
 Pro Cys Ile Leu Phe Val Ile Leu Thr Val Leu Arg Phe Gln Glu Pro
 35 40 45
 Pro Arg Tyr Arg Asp Ile Cys Tyr Leu Gln Pro Arg Asp Leu Pro Ser
 50 55 60
 Cys Gly Val Ile Pro Phe Val Gln Ser Leu Leu Cys Asn Thr Gly Ser
 65 70 75 80
 Arg Cys Arg Asn Phe Ser Tyr Glu Gly Ser Met Glu His His Phe Arg
 85 90 95
 Leu Ser Arg Phe Gln Thr Ala Ala Asp Pro Lys Lys Val Asn Asn Leu
 100 105 110
 Ala Phe Leu Lys Glu Ile Gln Asp Leu Ala
 115 120

<210> 4105

<211> 132

<212> PRT

<213> Homo sapiens

<400> 4105

Met Ser Ser Ile Val Cys Pro Met Glu Glu Val Leu Arg Ala Ser Ala
 1 5 10 15
 Gln Asn Lys Asp Asn Thr Lys Gly Ile Gly Arg Phe Tyr Lys Ala Gln
 20 25 30
 Phe Leu Ser Leu Met Ser Phe Ile Lys Tyr Phe Pro Tyr Tyr Leu Lys
 35 40 45
 Ala Thr Ile Gln Ser Ser Phe Ser Ala Ser Thr Val His Leu Val Cys
 50 55 60
 Gly Thr His Ser Val Gln Cys Phe Ile Phe Pro Val Ser Ile Ala Cys
 65 70 75 80
 His Leu Gly Arg Ile Leu Ile Ser Pro Val Thr Thr Thr Pro Asn Arg
 85 90 95
 Ala Leu His Gly Ser Glu Cys Ser Lys Tyr His Leu Leu Thr Asn Ala
 100 105 110

Ser Lys Ser Thr Thr Asn Gln Asn Ile Val Pro Lys Glu Lys Ser Thr
 115 120 125

Lys Tyr His Asn

130

<210> 4106

<211> 824

<212> PRT

<213> Homo sapiens

<400> 4106

Met Ile Arg Ser Ser Ser Asp Ser Ser Tyr Met Ser Gly Ser Pro Gly
 1 5 10 15
 Gly Ser Pro Gly Ser Gly Ser Ala Glu Lys Pro Ser Ser Asp Val Asp
 20 25 30
 Ile Ser Thr His Ser Pro Ser Leu Pro Leu Ala Arg Glu Pro Val Val
 35 40 45
 Leu Ser Ile Ala Ser Ser Arg Leu Pro Gln Glu Ser Pro Pro Leu Pro
 50 55 60
 Glu Ser Arg Asp Ser His Pro Pro Leu Arg Leu Lys Lys Ser Phe Glu
 65 70 75 80
 Ile Leu Val Arg Lys Pro Met Ser Ser Lys Pro Lys Pro Pro Pro Arg
 85 90 95
 Lys Tyr Phe Lys Ser Asp Ser Asp Pro Gln Lys Ser Leu Glu Glu Arg
 100 105 110
 Glu Asn Ser Ser Cys Ser Ser Gly His Thr Pro Pro Thr Cys Gly Gln
 115 120 125
 Glu Ala Arg Glu Leu Leu Pro Leu Leu Leu Pro Gln Glu Asp Thr Ala
 130 135 140
 Gly Arg Ser Pro Ser Ala Ser Ala Gly Cys Pro Gly Pro Gly Ile Gly
 145 150 155 160
 Pro Gln Thr Lys Ser Ser Thr Glu Gly Glu Pro Gly Trp Arg Arg Ala
 165 170 175
 Ser Pro Val Thr Gln Thr Ser Pro Ile Lys His Pro Leu Leu Lys Arg
 180 185 190

Gln Ala Arg Met Asp Tyr Ser Phe Asp Thr Thr Ala Glu Asp Pro Trp
 195 200 205
 Val Arg Ile Ser Asp Cys Ile Lys Asn Leu Phe Ser Pro Ile Met Ser
 210 215 220
 Glu Asn His Gly His Met Pro Leu Gln Pro Asn Ala Ser Leu Asn Glu
 225 230 235 240
 Glu Glu Gly Thr Gln Gly His Pro Asp Gly Thr Pro Pro Lys Leu Asp
 245 250 255
 Thr Ala Asn Gly Thr Pro Lys Val Tyr Lys Ser Ala Asp Ser Ser Thr
 260 265 270
 Val Lys Lys Gly Pro Pro Val Ala Pro Lys Pro Ala Trp Phe Arg Gln
 275 280 285
 Ser Leu Lys Gly Leu Arg Asn Arg Ala Ser Asp Pro Arg Gly Leu Pro
 290 295 300
 Asp Pro Ala Leu Ser Thr Gln Pro Ala Pro Ala Ser Arg Glu His Leu
 305 310 315 320
 Gly Ser His Ile Arg Ala Ser Ser Ser Ser Ser Ile Arg Gln Arg Ile
 325 330 335
 Ser Ser Phe Glu Thr Phe Gly Ser Pro Gln Leu Pro Asp Lys Gly Ala
 340 345 350
 Gln Arg Leu Ser Leu Gln Pro Ser Ser Gly Glu Ala Ala Lys Pro Leu
 355 360 365
 Gly Lys His Glu Glu Gly Arg Phe Ser Gly Leu Leu Gly Arg Gly Ala
 370 375 380
 Ala Pro Thr Leu Val Pro Gln Gln Pro Glu Gln Val Leu Ser Ser Gly
 385 390 395 400
 Ser Pro Ala Ala Ser Glu Ala Arg Asp Pro Gly Val Ser Glu Ser Pro
 405 410 415
 Pro Pro Gly Arg Gln Pro Asn Gln Lys Thr Leu Pro Pro Gly Pro Asp
 420 425 430
 Pro Leu Leu Arg Leu Leu Ser Thr Gln Ala Glu Glu Ser Gln Gly Pro
 435 440 445
 Val Leu Lys Met Pro Ser Gln Arg Ala Arg Ser Phe Pro Leu Thr Arg
 450 455 460
 Ser Gln Ser Cys Glu Thr Lys Leu Leu Asp Glu Lys Thr Ser Lys Leu
 465 470 475 480

Tyr Ser Ile Ser Ser Gln Val Ser Ser Ala Val Met Lys Ser Leu Leu
 485 490 495
 Cys Leu Pro Ser Ser Ile Ser Cys Ala Gln Thr Pro Cys Ile Pro Lys
 500 505 510
 Glu Gly Ala Ser Pro Thr Ser Ser Ser Asn Glu Asp Ser Ala Ala Asn
 515 520 525
 Gly Ser Ala Glu Thr Ser Ala Leu Asp Thr Gly Phe Ser Leu Asn Leu
 530 535 540
 Ser Glu Leu Arg Glu Tyr Thr Glu Gly Leu Thr Glu Ala Lys Glu Asp
 545 550 555 560
 Asp Asp Gly Asp His Ser Ser Leu Gln Ser Gly Gln Ser Val Ile Ser
 565 570 575
 Leu Leu Ser Ser Glu Glu Leu Lys Lys Leu Ile Glu Glu Val Lys Val
 580 585 590
 Leu Asp Glu Ala Thr Leu Lys Gln Leu Asp Gly Ile His Val Thr Ile
 595 600 605
 Leu His Lys Glu Glu Gly Ala Gly Leu Gly Phe Ser Leu Ala Gly Gly
 610 615 620
 Ala Asp Leu Glu Asn Lys Val Ile Thr Val His Arg Val Phe Pro Asn
 625 630 635 640
 Gly Leu Ala Ser Gln Glu Gly Ala Ile Gln Lys Gly Asn Glu Val Leu
 645 650 655
 Ser Ile Asn Gly Lys Ser Leu Lys Gly Thr Thr His His Asp Ala Leu
 660 665 670
 Ala Ile Leu Arg Gln Ala Arg Glu Pro Arg Gln Ala Val Ile Val Thr
 675 680 685
 Arg Lys Leu Thr Pro Glu Ala Met Pro Asp Leu Asn Ser Ser Thr Asp
 690 695 700
 Ser Ala Ala Ser Ala Ser Ala Ala Ser Asp Val Ser Val Glu Ser Thr
 705 710 715 720
 Glu Ala Thr Val Cys Thr Val Thr Leu Glu Lys Met Ser Ala Gly Leu
 725 730 735
 Gly Phe Ser Leu Glu Gly Gly Lys Gly Ser Leu His Gly Asp Lys Pro
 740 745 750
 Leu Thr Ile Asn Arg Ile Phe Lys Gly Ala Ala Ser Glu Gln Ser Glu
 755 760 765

Thr Val Gln Pro Gly Asp Glu Ile Leu Gln Leu Gly Gly Thr Ala Met
 770 775 780
 Gln Gly Leu Thr Arg Phe Glu Ala Trp Asn Ile Ile Lys Ala Leu Pro
 785 790 795 800
 Asp Gly Pro Val Thr Ile Val Ile Arg Arg Lys Ser Leu Gln Ser Lys
 805 810 815
 Glu Thr Thr Ala Ala Gly Asp Ser
 820

<210> 4107

<211> 146

<212> PRT

<213> Homo sapiens

<400> 4107

Met Glu Gln Glu Ser Glu Cys Thr Arg Glu Thr Val Arg Pro Thr Ala
 1 5 10 15
 Gln Ala Ser Trp Pro Ser Ala Trp Leu Leu Gly Cys Ala Asp Gly
 20 25 30
 Cys Val Leu Arg Gly Tyr Ile Ser Cys Leu Arg Cys Leu Pro Leu Pro
 35 40 45
 Arg Thr Phe Ile Gly Leu Glu Val Thr Ser Gly His Ala Gln Phe Leu
 50 55 60
 Asp Leu Val Ser Glu Val Asp Arg Val Met Glu Glu Phe Asn Leu Thr
 65 70 75 80
 Thr Phe Tyr Gln Asp Pro Ser Phe His Leu Ser Leu Ala Trp Cys Val
 85 90 95
 Gly Asp Ala Arg Leu Gln Leu Glu Gly Gln Cys Leu Gln Glu Leu Gln
 100 105 110
 Ala Ile Val Asp Gly Phe Glu Asp Ala Glu Val Leu Leu Arg Val His
 115 120 125
 Thr Glu Gln Val Arg Cys Lys Ser Gly Asn Lys Phe Phe Ser Met Pro
 130 135 140
 Leu Lys
 145

<210> 4108

<211> 139

<212> PRT

<213> Homo sapiens

<400> 4108

```

Met Val Leu Pro Gly Leu Thr Leu Cys Ser Gly Ala Val Gly Thr Ser
 1             5             10             15
Thr Gln Trp Leu Met Ala Ala Leu Ala Gln Leu Ser Arg Pro Gly Arg
      20             25             30
Arg Leu Pro Pro Pro Pro Pro Cys Cys Cys Leu Val Gln Pro Leu His
      35             40             45
Gly Ser Ser Ser Leu Cys Gln Arg Glu Gly Leu Phe His His Lys Gln
      50             55             60
His Ser His Ser His Gly Ala Trp Phe Leu Ser Pro Val His His Ser
      65             70             75             80
Gln Ile Pro Gln Leu Ala Ala Cys Pro Leu Gln Ser Leu Arg Leu Ser
      85             90             95
Lys Pro Arg Ser Pro Gly Arg Cys Cys Ala Trp Cys Gly Cys Leu Asn
      100            105            110
Cys Glu Pro Phe Lys Trp Leu Pro Ser Pro Arg Arg Trp Pro Gly Ala
      115            120            125
Cys Leu Lys Leu Cys Cys Thr Gln Ala Leu Cys
      130            135

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<210> 4109

<211> 189

<212> PRT

<213> Homo sapiens

<400> 4109

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Met Gln Asn Gly Ala Asp Trp Leu Phe Pro Pro Gln Leu Tyr Ser Leu
 1             5             10             15

```

Leu Glu Arg Ile Asn Pro Asp His Ser Phe Pro Val Ser Ser His Cys
 20 25 30

Leu Arg Ala Ala Ala Phe Tyr Val Arg Gly Leu Phe Ser Phe Phe Gln
 35 40 45

Gly Arg Tyr Asn Glu Ala Lys Arg Phe Leu Arg Glu Thr Leu Lys Met
 50 55 60

Ser Asn Ala Glu Asp Leu Asn Arg Leu Thr Ala Cys Ser Leu Val Leu
 65 70 75 80

Leu Gly His Ile Phe Tyr Val Leu Gly Asn His Arg Glu Ser Asn Asn
 85 90 95

Met Val Val Pro Ala Met Gln Leu Ala Ser Lys Ile Pro Asp Met Ser
 100 105 110

Val Gln Leu Trp Ser Ser Ala Leu Leu Arg Asp Leu Asn Lys Ala Cys
 115 120 125

Gly Asn Ala Met Asp Ala His Glu Ala Ala Gln Met His Gln Asn Phe
 130 135 140

Ser Gln Gln Leu Leu Gln Asp His Ile Glu Ala Cys Ser Leu Pro Glu
 145 150 155 160

His Asn Leu Ile Thr Trp Thr Asp Gly Pro Pro Pro Val Gln Phe Gln
 165 170 175

Ala Gln Asn Gly Pro Asn Thr Ser Leu Ala Ser Leu Leu
 180 185

<210> 4110

<211> 851

<212> PRT

<213> Homo sapiens

<400> 4110

Met Leu Lys Asp Glu Phe His Leu Lys Phe Phe Met Cys Val Ile Gln
 1 5 10 15

Ser Arg Gln Leu Val Arg Thr Pro Gln Arg Thr Ala Gly Glu Ala Ser
 20 25 30

Thr Ser Ser Met Leu Ile Pro Lys Pro Pro Pro Lys Thr Asp Ile Leu
 35 40 45
 Lys Ser Leu Asp Thr Met Asp Asp Pro Asp Thr Val Gly Ser Ile Pro
 50 55 60
 Val Phe Lys Thr Glu Trp Ile Met Thr His Glu Glu His His Ala Ala
 65 70 75 80
 Lys Thr Leu Gly Ile Gly Lys Ala Ile Ala Val Leu Thr Ser Gly Gly
 85 90 95
 Asp Ala Gln Gly Met Asn Ala Ala Val Arg Ala Val Val Arg Val Gly
 100 105 110
 Ile Phe Thr Gly Ala Arg Val Phe Phe Val His Glu Gly Tyr Gln Gly
 115 120 125
 Leu Val Asp Gly Gly Asp His Ile Lys Glu Ala Thr Trp Glu Ser Val
 130 135 140
 Ser Met Met Leu Gln Leu Gly Gly Thr Val Ile Gly Ser Ala Arg Cys
 145 150 155 160
 Lys Asp Phe Arg Glu Arg Glu Gly Arg Leu Arg Ala Ala Tyr Asn Leu
 165 170 175
 Val Lys Arg Gly Ile Thr Asn Leu Cys Val Ile Gly Gly Asp Gly Ser
 180 185 190
 Leu Thr Gly Ala Asp Thr Phe Arg Ser Glu Trp Ser Asp Leu Leu Ser
 195 200 205
 Asp Leu Gln Lys Ala Gly Lys Ile Thr Asp Glu Glu Ala Thr Lys Ser
 210 215 220
 Ser Tyr Leu Asn Ile Val Gly Leu Val Gly Ser Ile Asp Asn Asp Phe
 225 230 235 240
 Cys Gly Thr Asp Met Thr Ile Gly Thr Asp Ser Ala Leu His Arg Ile
 245 250 255
 Met Glu Ile Val Asp Ala Ile Thr Thr Thr Ala Gln Ser His Gln Arg
 260 265 270
 Thr Phe Val Leu Glu Val Met Gly Arg His Cys Gly Tyr Leu Ala Leu
 275 280 285
 Val Thr Ser Leu Ser Cys Gly Ala Asp Trp Val Phe Ile Pro Glu Cys
 290 295 300
 Pro Pro Asp Asp Asp Trp Glu Glu His Leu Cys Arg Arg Leu Ser Glu
 305 310 315 320

Thr Arg Thr Arg Gly Ser Arg Leu Asn Ile Ile Ile Val Ala Glu Gly
 325 330 335
 Ala Ile Asp Lys Asn Gly Lys Pro Ile Thr Ser Glu Asp Ile Lys Asn
 340 345 350
 Leu Val Val Lys Arg Leu Gly Tyr Asp Thr Arg Val Thr Val Leu Gly
 355 360 365
 His Val Gln Arg Gly Gly Thr Pro Ser Ala Phe Asp Arg Ile Leu Gly
 370 375 380
 Ser Arg Met Gly Val Glu Ala Val Met Ala Leu Leu Glu Gly Thr Pro
 385 390 395 400
 Asp Thr Pro Ala Cys Val Val Ser Leu Ser Gly Asn Gln Ala Val Arg
 405 410 415
 Leu Pro Leu Met Glu Cys Val Gln Val Thr Lys Asp Val Thr Lys Ala
 420 425 430
 Met Asp Glu Lys Lys Phe Asp Glu Ala Leu Lys Leu Arg Gly Arg Ser
 435 440 445
 Phe Met Asn Asn Trp Glu Val Tyr Lys Leu Leu Ala His Val Arg Pro
 450 455 460
 Pro Val Ser Lys Ser Gly Ser His Thr Val Ala Val Met Asn Val Gly
 465 470 475 480
 Ala Pro Ala Ala Gly Met Asn Ala Ala Val Arg Ser Thr Val Arg Ile
 485 490 495
 Gly Leu Ile Gln Gly Asn Arg Val Leu Val Val His Asp Gly Phe Glu
 500 505 510
 Gly Leu Ala Lys Gly Gln Ile Glu Glu Ala Gly Trp Ser Tyr Val Gly
 515 520 525
 Gly Trp Thr Gly Gln Gly Gly Ser Lys Leu Gly Thr Lys Arg Thr Leu
 530 535 540
 Pro Lys Lys Ser Phe Glu Gln Ile Ser Ala Asn Ile Thr Lys Phe Asn
 545 550 555 560
 Ile Gln Gly Leu Val Ile Ile Gly Gly Phe Glu Ala Tyr Thr Gly Gly
 565 570 575
 Leu Glu Leu Met Glu Gly Arg Lys Gln Phe Asp Glu Leu Cys Ile Pro
 580 585 590
 Phe Val Val Ile Pro Ala Thr Val Ser Asn Asn Val Pro Gly Ser Asp
 595 600 605

Phe Ser Val Gly Ala Asp Thr Ala Leu Asn Thr Ile Cys Thr Thr Cys
 610 615 620
 Asp Arg Ile Lys Gln Ser Ala Ala Gly Thr Lys Arg Arg Val Phe Ile
 625 630 635 640
 Ile Glu Thr Met Gly Gly Tyr Cys Gly Tyr Leu Ala Thr Met Ala Gly
 645 650 655
 Leu Ala Ala Gly Ala Asp Ala Ala Tyr Ile Phe Glu Glu Pro Phe Thr
 660 665 670
 Ile Arg Asp Leu Gln Ala Asn Val Glu His Leu Val Gln Lys Met Lys
 675 680 685
 Thr Thr Val Lys Arg Gly Leu Val Leu Arg Asn Glu Lys Cys Asn Glu
 690 695 700
 Asn Tyr Thr Thr Asp Phe Ile Phe Asn Leu Tyr Ser Glu Glu Gly Lys
 705 710 715 720
 Gly Ile Phe Asp Ser Arg Lys Asn Val Leu Gly His Met Gln Gln Gly
 725 730 735
 Gly Ser Pro Thr Ser Phe Asp Arg Asn Phe Ala Thr Lys Met Gly Ala
 740 745 750
 Lys Ala Met Asn Trp Met Ser Gly Lys Ile Lys Glu Ser Tyr Arg Asn
 755 760 765
 Gly Arg Ile Phe Ala Asn Thr Pro Asp Ser Gly Cys Val Leu Gly Met
 770 775 780
 Arg Lys Arg Ala Leu Val Phe Gln Pro Val Ala Glu Leu Lys Asp Gln
 785 790 795 800
 Thr Asp Phe Glu His Arg Ile Pro Lys Glu Gln Trp Trp Leu Lys Leu
 805 810 815
 Arg Pro Ile Leu Lys Ile Leu Ala Lys Tyr Glu Ile Asp Leu Asp Thr
 820 825 830
 Ser Asp His Ala His Leu Glu His Ile Thr Arg Lys Arg Ser Gly Glu
 835 840 845
 Ala Ala Val
 850

<210> 4111

<211> 112

<212> PRT

<213> Homo sapiens

<400> 4111

```

Met Asp Asn Ser Val Arg Val Tyr Pro Glu Thr Leu Gln Glu Thr Phe
  1              5              10              15
Thr Glu Ala Pro Gly Phe Phe Thr Ser Ala Pro Asp Cys Thr Ser Trp
              20              25              30
Thr Trp Ala Trp Val Pro Val Glu Arg Thr Glu Glu Trp Met Arg His
              35              40              45
His Leu Thr Gly Pro Ser Pro Leu Ile Ser Pro Gly Thr Gln Asp Ser
              50              55              60
Leu Ala Cys Ser Cys Cys His Gln Glu Glu Asp Pro Pro Gly Ala Val
              65              70              75              80
His Gly Glu Val Leu Arg Ser Gly Gly Phe Cys Arg Gly Gly Met Trp
              85              90              95
Leu Leu Cys Asp Gly Leu Trp Ala Arg Lys Asp Leu Tyr Leu Pro Arg
              100              105              110

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<210> 4112

<211> 196

<212> PRT

<213> Homo sapiens

<400> 4112

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Met Pro Glu Ala Val Asp Val Asp Glu Ser Gln Leu Glu Asn Val Cys
  1              5              10              15
Leu Ser Trp Gln Asn Glu Thr Ser Ser Gly Asn Leu Glu Ser Cys Ala
              20              25              30
Gln Ala Arg Arg Val Thr Gly Gly Leu Leu Asp Arg Leu Asp Asp Ser
              35              40              45
Pro Asp Gln Cys Arg Asp Ser Ile Thr Ser Tyr Leu Lys Gly Glu Ala
              50              55              60
Gly Lys Phe Glu Ala Asn Gly Ser His Thr Glu Ile Thr Pro Glu Ala
              65              70              75              80

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Lys	Thr	Lys	Ser	Tyr	Phe	Pro	Glu	Ser	Gln	Asn	Asp	Val	Gly	Lys	Gln
				85				90				95			
Ser	Thr	Lys	Glu	Thr	Leu	Lys	Pro	Lys	Ile	His	Gly	Ser	Gly	His	Val
				100				105				110			
Glu	Glu	Pro	Ala	Ser	Pro	Leu	Ala	Ala	Tyr	Gln	Lys	Ser	Leu	Glu	Glu
				115				120				125			
Thr	Ser	Lys	Leu	Ile	Ile	Glu	Glu	Thr	Lys	Pro	Cys	Val	Pro	Val	Ser
				130				135				140			
Met	Lys	Lys	Met	Ser	Arg	Thr	Ser	Pro	Ala	Asp	Gly	Lys	Pro	Arg	Leu
145				150				155				160			
Ser	Leu	His	Glu	Glu	Glu	Gly	Ser	Ser	Gly	Ser	Glu	Gln	Lys	Gln	Gly
				165				170				175			
Glu	Gly	Phe	Lys	Val	Lys	Thr	Lys	Lys	Glu	Ile	Arg	His	Val	Glu	Lys
				180				185				190			
Lys	Ser	His	Ser												
195															

<210> 4113

 $\langle 211 \rangle$ 111

<212> PRT

<213> Homo sapiens

<400> 4113

Met	Ser	Met	Pro	Ala	Ser	Thr	Ser	Ser	His	Ile	Val	Asn	Phe	Ser	Phe
1				5					10					15	
Tyr	Lys	Ser	Cys	Cys	Gln	Gln	Ile	Gly	Leu	Phe	Leu	Lys	Pro	Leu	Ile
			20					25					30		
Tyr	Ile	Phe	Leu	Phe	Leu	Phe	Glu	Phe	Ser	Cys	Ser	Cys	Gly	Trp	Leu
		35					40					45			
Val	Gly	Pro	Asp	Asn	Gly	Thr	Gly	Ala	Ala	Pro	Met	His	Cys	Leu	Leu
	50					55					60				
Phe	Phe	Leu	Phe	Phe	Ser	Asn	Phe	Phe	Phe	Leu	Phe	Pro	Phe	Leu	Phe
65				70						75				80	
Tyr	Thr	Phe	Ile	Phe	Phe	Phe	Ser	Leu	Leu	Phe	Ser	Trp	Arg	Trp	Phe
			85					90						95	

Pro Pro Pro Leu Phe Leu Asp Arg Ala Gly Leu Gly Arg Gly Thr
 100 105 110

<210> 4114

<211> 126

<212> PRT

<213> Homo sapiens

<400> 4114

Met Asn Ile Ser Val Lys Ala Val Pro Leu Gly Leu Thr Arg Asp Leu
 1 5 10 15
 Ile Ser Val Leu Cys Val Leu Ala Thr Ser Arg Val Arg Ile Ser Ala
 20 25 30
 Cys Pro Thr Ala Met Arg Asp Thr Thr Ala Thr Leu Gly Leu Ser Gly
 35 40 45
 Glu Ser Val Thr Glu Leu His Gln Asp Gly Ala Leu Pro His Pro Ser
 50 55 60
 Ala Cys Gln His Cys Ser Ser Lys Glu Pro Asp Val Thr Cys His Ser
 65 70 75 80
 Arg Val Gly Val Ile Leu Trp Val Ser Ser Trp Val Ala Pro Val Arg
 85 90 95
 Ala Val Pro Thr Thr Pro Thr Ala Pro Glu Ser Gly Gly Trp His Gln
 100 105 110
 Gly Cys Leu Thr Ser Ala Pro Gln Cys Phe Ser Leu Trp Leu
 115 120 125

<210> 4115

<211> 106

<212> PRT

<213> Homo sapiens

<400> 4115

Met Lys Thr Glu Leu Pro Val Gln Lys Gly Ser Arg Leu Pro Pro Pro
 1 5 10 15

Pro Pro Pro Cys Thr Ser Cys Pro Leu Pro Val His Ser Trp Asn Gln
 20 25 30
 Pro Gly Gln Ala Thr Ser Gly Pro Gln Arg Gln Ala Gly Ser Ser Gly
 35 40 45
 Pro Ser Arg Gly Arg Leu Glu Gly Leu Ala Asp Arg Phe Pro His Pro
 50 55 60
 Pro Pro Pro Val Gln Val Phe Ala Ala Val Pro Arg Pro Pro Val Thr
 65 70 75 80
 Pro Arg Gln Ile Thr Gly His Gln Ala Arg Asp Ser Leu Leu Phe Val
 85 90 95
 Leu Ser Gly Leu Trp Leu Val Ser Phe Ser
 100 105

<210> 4116

<211> 213

<212> PRT

<213> Homo sapiens

<400> 4116

Met Leu Val Gly Cys Met Tyr Val Phe Phe Arg Lys Val Ser Val Arg
 1 5 10 15
 His Leu Ser Lys Glu Asp Ile Tyr Ala Ala Lys Lys His Met Lys Lys
 20 25 30
 Cys Ser Ala Ser Leu Ala Ile Arg Glu Met Gln Ile Lys Thr Thr Met
 35 40 45
 Arg Cys His Leu Thr Pro Val Arg Met Ala Ile Ile Arg Lys Ser Gly
 50 55 60
 Asn Asn Arg Cys Trp Arg Gly Cys Gly Glu Ile Gly Thr Leu Leu His
 65 70 75 80
 Cys Cys Trp Asp Cys Lys Leu Val Gln Pro Leu Trp Lys Ser Val Trp
 85 90 95
 Gln Phe Leu Arg Asp Leu Glu Leu Glu Ile Pro Phe Asp Pro Ala Ile
 100 105 110
 Pro Leu Leu Gly Ile Tyr Pro Lys Asp Tyr Lys Ser Cys Cys Tyr Lys
 115 120 125

Asp Thr Cys Thr Cys Met Phe Ile Ala Ala Leu Phe Thr Ile Ala Lys
 130 135 140
 Thr Trp Asn Pro Pro Lys Arg Pro Thr Met Ile Asp Trp Ile Lys Lys
 145 150 155 160
 Met Cys His Ile Tyr Thr Met Glu Tyr Tyr Ala Ala Ile Lys Asn Asp
 165 170 175
 Glu Phe Thr Ser Phe Val Gly Thr Trp Met Lys Leu Glu Ile Ile Ile
 180 185 190
 Leu Ser Lys Leu Ser Gln Glu Gln Lys Thr Lys His His Ile Phe Ser
 195 200 205
 Leu Ile Gly Gly Asn
 210

<210> 4117

<211> 137

<212> PRT

<213> Homo sapiens

<400> 4117

Met Leu His Lys Asp Ala Leu Cys Ala Arg Arg Arg His Cys Gln Leu
 1 5 10 15
 Cys Gly Gly Asp Arg Ser Glu Thr Val Ser Leu Glu Asp Leu Leu Gly
 20 25 30
 Gln Glu Gly Val Ser Asp Glu Ala Gln Gly Arg Leu Gly Arg Ser Val
 35 40 45
 Gly Phe Gly Ala Gly Ile Ser Glu Phe Trp Pro Val Pro Leu Pro Pro
 50 55 60
 Pro Val Gln Val Ala Gln Ala Gln Ser Pro Thr Ser Ala Arg Ala Pro
 65 70 75 80
 Gln Gly Ser Trp Ala His Pro Asn Ser Ser Val Cys Pro Leu Trp Pro
 85 90 95
 Pro Pro Pro Pro Ala Gly Ser Pro Gly Pro Leu Pro Leu Pro Ala Arg
 100 105 110
 Leu Pro Cys Ala Ala Trp Asp His Phe Thr Lys Ser Phe Val Phe Gly
 115 120 125

Pro Tyr Gly Asn Leu Leu Arg Gln Glu

130

135

<210> 4118

<211> 129

<212> PRT

<213> Homo sapiens

<400> 4118

Met Ile Trp Arg Lys Leu Lys Cys Leu Leu Trp Leu Gln Arg Ser Glu

1

5

10

15

Gly Thr Leu His Ser Trp Leu Asp Arg Leu Asn Ser Gly Ile Gly Glu

20

25

30

Val Val Gly Glu Trp Arg Gly Ala Glu Gly Thr Asp Thr Gly Arg Asp

35

40

45

Ile Ser Lys Asp Cys Gln Gln Gly Met Met Ile Thr Gln Gly Glu Gln

50

55

60

Val Gln Pro Val Ser Trp Cys Cys Pro Glu Leu Met Thr Ala Ile Lys

65

70

75

80

Leu Pro Asp Phe Thr Ala Cys Ser Ala Leu Cys Pro Pro Gly Ile Leu

85

90

95

Gly Thr Phe Ser Arg Leu Gly Pro Gln Gly Arg Leu Glu Ala Ala His

100

105

110

Ser Leu His Cys Gln Ala Leu Ala Gly Gln Trp Ser Trp Gly Glu Gly

115

120

125

Gly

<210> 4119

<211> 325

<212> PRT

<213> Homo sapiens

<400> 4119

Met	Leu	Leu	Phe	Ser	Leu	Trp	Tyr	Pro	Leu	Leu	Leu	Cys	Lys	Leu	Leu
1				5					10					15	
Leu	Thr	Lys	Ile	Asn	Trp	Arg	Lys	Lys	Arg	Lys	Lys	Lys	Lys	Glu	Glu
			20					25					30		
Lys	Lys	Arg	Glu	Lys	Glu	Pro	Glu	Lys	Pro	Ala	Lys	Pro	Leu	Thr	Ala
		35					40					45			
Glu	Lys	Leu	Gln	Lys	Lys	Asp	Gln	Gln	Leu	Glu	Pro	Lys	Lys	Ser	Thr
	50					55					60				
Ser	Pro	Lys	Lys	Ala	Ala	Glu	Pro	Thr	Val	Asp	Leu	Leu	Gly	Leu	Asp
65				70					75					80	
Gly	Pro	Ala	Val	Ala	Pro	Val	Thr	Asn	Gly	Asn	Thr	Thr	Val	Pro	Pro
			85					90					95		
Leu	Asn	Asp	Asp	Leu	Asp	Ile	Phe	Gly	Pro	Met	Ile	Ser	Asn	Pro	Leu
		100						105					110		
Pro	Ala	Thr	Val	Met	Pro	Pro	Ala	Gln	Ala	Thr	Pro	Ser	Ala	Pro	Ala
		115					120					125			
Ala	Ala	Thr	Leu	Ser	Thr	Val	Thr	Ser	Gly	Asp	Leu	Asp	Leu	Phe	Thr
	130					135					140				
Glu	Gln	Thr	Thr	Lys	Ser	Glu	Glu	Val	Ala	Lys	Lys	Gln	Leu	Ser	Lys
145				150					155				160		
Asp	Ser	Ile	Leu	Ser	Leu	Tyr	Gly	Thr	Gly	Thr	Ile	Gln	Gln	Gln	Ser
		165						170				175			
Thr	Pro	Gly	Val	Phe	Met	Gly	Pro	Thr	Asn	Ile	Pro	Phe	Thr	Ser	Gln
		180						185				190			
Ala	Pro	Ala	Ala	Phe	Gln	Gly	Phe	Pro	Ser	Met	Gly	Val	Pro	Val	Pro
	195					200					205				
Ala	Ala	Pro	Gly	Leu	Ile	Gly	Asn	Val	Met	Gly	Gln	Ser	Pro	Ser	Met
	210					215				220					
Met	Val	Gly	Met	Pro	Met	Pro	Asn	Gly	Phe	Met	Gly	Asn	Ala	Gln	Thr
225				230					235					240	
Gly	Val	Met	Pro	Leu	Pro	Gln	Asn	Val	Val	Gly	Pro	Gln	Gly	Gly	Met
		245						250				255			
Val	Gly	Gln	Met	Gly	Ala	Pro	Gln	Ser	Lys	Phe	Gly	Leu	Pro	Gln	Ala
		260						265				270			
Gln	Gln	Pro	Gln	Trp	Ser	Leu	Ser	Gln	Met	Asn	Gln	Gln	Met	Ala	Gly
	275						280					285			

Met Ser Ile Ser Ser Ala Thr Pro Thr Ala Gly Phe Gly Gln Pro Ser
 290 295 300
 Ser Thr Thr Ala Gly Trp Ser Gly Ser Ser Ser Gly Gln Thr Leu Ser
 305 310 315 320
 Thr Gln Leu Trp Lys
 325

<210> 4120

<211> 209

<212> PRT

<213> Homo sapiens

<400> 4120

Met Pro Gly Ser Cys Ala Glu Met Arg Thr Cys Ile Leu Ala Gly His
 1 5 10 15
 Gly Gly Ser Leu Ser Asn Leu Met Asp Phe Val Lys Lys Thr Gly Ile
 20 25 30
 Cys Ala Ser Lys Trp Glu Trp Gly Thr Thr His Asn Phe Leu Tyr Lys
 35 40 45
 His Gly Gly Ile Arg Asp Lys Ile Met Ser Ser Arg Lys His Leu His
 50 55 60
 Leu Val Asp Ala Gly Leu Ala Ile Asn Thr Pro Phe Pro Leu Val Leu
 65 70 75 80
 Pro Pro Thr Arg Glu Val His Leu Ile Leu Ser Phe Asp Phe Ser Ala
 85 90 95
 Gly Asp Pro Phe Glu Thr Ile Arg Ala Thr Thr Asp Tyr Cys Arg Arg
 100 105 110
 His Lys Ile Pro Phe Pro Gln Val Glu Glu Ala Glu Leu Asp Leu Trp
 115 120 125
 Ser Lys Ala Pro Ala Ser Cys Tyr Ile Leu Lys Gly Glu Thr Gly Pro
 130 135 140
 Val Val Met His Phe Pro Leu Phe Asn Ile Asp Ala Cys Gly Gly Asp
 145 150 155 160
 Ile Glu Ala Trp Ser Asp Thr Tyr Asp Thr Phe Lys Leu Ala Asp Thr
 165 170 175

Tyr Thr Leu Asp Val Val Val Leu Leu Leu Ala Leu Ala Lys Lys Asn
 180 185 190
 Val Arg Glu Asn Lys Lys Lys Ile Leu Arg Glu Leu Met Asn Val Ala
 195 200 205
 Gly

<210> 4121

<211> 168

<212> PRT

<213> Homo sapiens

<400> 4121

Met Ala Asn Arg Asp Ser Ala Ser Pro His Ser Pro Pro Arg Arg Arg
 1 5 10 15
 Arg Cys Leu Gly Gly Pro Thr Val Leu Pro Leu Arg Lys Ile His Ala
 20 25 30
 Gly Cys Tyr Gly Pro Gln Pro Pro His Arg His Pro Arg Pro Leu His
 35 40 45
 Thr Val Ser Leu Pro Ser Pro Asn Thr Leu Leu Pro Gln Pro Gly Asp
 50 55 60
 Pro Trp Met Glu Asp Trp Ala Ser Gln Ser Gly Arg Gln Asp Gln Arg
 65 70 75 80
 Val Cys Glu His Thr Cys Val Pro Ala Asp Met Pro Gln Asp Pro Arg
 85 90 95
 Asp Ala Pro Ala Pro Val Thr Trp Cys Gln Ser Tyr Leu Gly Asn Trp
 100 105 110
 Pro Phe Trp Phe Arg Val Asn Trp Glu Val Lys Pro Leu Gly Phe Val
 115 120 125
 Glu Lys Arg Thr Val Arg Glu Met Leu Cys His Leu Val Arg Lys Thr
 130 135 140
 Phe Phe Leu Ser Ser Lys Ile Met Met Gly Phe Phe Trp Ile Cys Phe
 145 150 155 160
 Thr Asn Lys Ser Asp Trp Ser Ile
 165

<210> 4122

<211> 118

<212> PRT

<213> Homo sapiens

<400> 4122

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Met Asn Pro Gln Ala Trp Thr Gly Ala Pro Glu Glu Ala His Thr Leu
  1              5              10              15
Leu Leu Ser Leu Leu Leu Ile Phe Ser Val Trp Leu His Leu Cys His
              20              25              30
Ser Cys Cys Thr Asp Leu Cys Met Pro Gly Lys Ala Lys Leu Ala Gln
              35              40              45
Lys Ala Thr Gly His Leu Cys Lys Val Val Pro Gly Ala Gly Gly Pro
              50              55              60
Ala Thr Asn Leu Thr Cys Cys Arg Ser Ala Tyr Ile Ser Ser Ser Thr
              65              70              75              80
Leu Glu Val Gly Pro Gln Cys His Met Leu Phe Leu Arg Pro Leu Leu
              85              90              95
Tyr Gln Ser Ser Gly Ser Asn His Ser Gly Cys Gly Asn Leu Ala Ile
              100              105              110
Pro Pro Ser Leu Ser Ser
              115

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<210> 4123

<211> 104

<212> PRT

<213> Homo sapiens

<400> 4123

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Met Val Leu Cys His Arg Gly Phe Tyr Tyr Tyr Asn Ile Lys Leu Glu
  1              5              10              15
Val Val Leu Val Pro Gly Val Cys Ser Glu Phe Pro Glu Glu Arg Glu
              20              25              30

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